MARMA SCIENCE AND PRINCIPLES OF MARMA THERAPY

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About the Book

A Science that was preserved and associated largely as a support to martial arts and warfare can now be used and applied for normal healing on a wide range of physical and mental diseases as a result of research and application, since 1993, of this little known branch of Ayurveda. Revealing the ancient healing art of Marma science and therapy, based on re-energising vital points in the body, this book releases it from its hidden status as Gupta Vidya, known in a limited way to a few practitioners. It is based on years of academic and practical research by the author with thousands of patients. The book not only gives the ancient background of Marma science and its salient features, but discusses in detail, with the references of contemporary medical science, its use as a powerful non-medicinal, non surgical therapy in numerous diseases. It also describes its use as a regular prophylactic and re-energising self-therapy and its relationship with religious and Yogic practices.

The book addresses a mix of three audiences: the regular medical practitioner and student, a peripheral and widening circle of practitioners of allied healing therapies on a paramedical type of approach, and then the academic as well as the common person. So indeed, the contents also have a mix of concept, theory, technical backgrounds and practical application. In the meanwhile, one can also consider the subject of this book, in the Indian tradition, as a spiritual science, as it is intimately concerned with the distribution of the universal energy in the individual body. Read with a quietened mind, the reader can grasp the basic knowledge of this book, that this individual body, vulnerable to disease and suffering, is not the whole truth. That the Universal Energy is coursing through us at all times and can be stimulated through the Marmas. In fact, in the
Preface, it is written how the power of self healing given to the human being by the Creator, can be awakened through Marma therapy and cause dramatic cure in many conditions.

Greatly useful/ interesting for doctors of all disciplines, medical students of all disciplines, peripheral health practitioners, and all interested in ancient Indian knowledge, Indian medical science, and also the vastly increasing number of lay people interested in healthcare systems offering self-help, or voluntary help.
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Preface

The health of the people reflects the social welfare parameters of any civilized state. This was the valuable achievement of the ancient Indian society. It was the key component of social values and indication of concern shown for the welfare of the common man by the Indian society. In the thousands of years of the history of India from Vedas to the present times, Indian society has proved that only the Vedic system can develop and provide a truly humane and efficient health service to our nation.

We have inherited a very old, in fact the oldest, Vedic medical system in our country. World history does not show such a viable and existing medical system like India’s, anywhere else across the globe. Therefore further development and expansion of such a viable Vedic medical system is the need of the hour. Preservation of health is a great personal treasure, so the health of society is a national treasure.

The forms, methods and the nature of the medical science and service have changed but the fundamental principles have stayed the same. The Vedic medical system in terms of marma science is highly humane, free, easily available and widely accessible in all aspects for all.

Forming a bridge across time, people became involved in the fight against diseases with marma science, pranayama and asanas, along with herbal medicines. In this aspect every person has the right to health protection by himself through marma science. It also guarantees the elderly and disabled to improve the quality of life as well as rehabilitation, -- in comparison to the present situation involving so-called modern medical science, where billions of dollars are invested in diagnostic tools, laboratory techniques and infrastructure but the net gain in terms of treatment is very limited.

There is a gap of thousands years in the teaching, training and learning of Vedic medical sciences due to many unavoidable circumstances. In the present situation where the whole medical science is away from the reach of the common man due to its
expensiveness and hazards, it was decided to take the privilege of making the format of this marma science and therapy. Apart from this, this format is directed towards showing the reader how to improve the performance of the marma procedures described by emphasizing the refinement of technique developed by the author through personal experience and feedback given by the patients.

The entire process of self-marma therapy and specific marma therapy for the ailments has been described in detail. In some diseases the focus is on prevention of common mistakes during the procedures of marma therapy and a guide to nuances of the procedures that will save time and injury to the marma point which may be fatal or harmful. Knowledge of important anatomical structures in relation to marma points is mandatory and it is a critical ingredient in marma practice and therapy. Important anatomical structures and landmarks have been highlighted in different chapters and their inter-relationship is also important to know, as they inform certain marma therapy procedures. It is a successful approach to deal with the problems one comes across during marma therapy. Being an untouched method of healing, more and more working hands are needed to spread the knowledge and benefit of this science. Teaching, training and confidence building in this science is the need of the hour.

Whether God is she or he, God loves us like mother and father. God has provided all things to us which are necessary for our existence and also provided many powers for mortal and immortal gains. Power of self-healing is one of them, by which we can keep ourself fit physically, mentally and spiritually.

Science discovers/unveils the physical/material and mortal world, while philosophy endeavors to interpret its actual meaning. Coordinating the scientific material viewpoints with the religious, spiritual concept, the Vedic medical sciences are more than that. God created the universe of His own free and sovereign will and He created the human being with His all-wise and eternal purpose. To the fulfilment of His eternal purpose He provided abundant powers in the human body. Sorrow and misery-less healthy life is also the outcome of that power. The self-healing power of God that dwells in the human being is not personal but this is the replica of heavenly powers in man. In this reference it is important to know that being son of God, man possesses all the characteristics of God.

The human body is a God-made machine with foolproof technology; whenever we disregard the basic norms of life it
becomes ill. Now the question is what life is and what are the norms of life? Body, sense organs, psyche (mind) and soul are collectively known as life (Ayu). These are discussed in the life sciences (Ayurveda).

_Marma_ science is the combination of scientific attitude and religious practices by the mediation of experiential philosophy and is part of the human beings' long experience in day to day life for the achievement of mortal and immortal gains.

In scientific, mortal state, nothing can be absolutely provided because the scientific results are predicated on assumptions.

_Marma_ science is an instant, permanent, natural, non-invasive way of healing today, because it succeeds in conserving many of the highest moral values of its adherents.

It promotes calmness; self control, self healing, realization and happiness and does much to prevent sufferings and sorrow.

Those who believe in the self-healing power of the human body, live better lives than many who do not, because they depend more on this science than the other conventional medical practices.

The realization of the recognition of the healing power of _marma_ therapy is an experience which is superideational. There is no word which can be employed to designate the scope and prospects of _marma_ therapy.

While _Ayurveda_ is not only a medical science but a way of life, it truly is one of the most noble ways of treatment, having originated out of a very long experience of thousands of years and culminated as final reality. The researchers and great scientists did not stop until it had speculated about almost every phase of medical science, expecting complete liberation from disease and sorrow.

Bridging across the times, in this way, the non medicinal, non surgical option of healing in terms of _marma vigyan_ was incorporated in the spiritual practices and rituals as a part and parcel of routine life. _Marma_ science was conceived to be beyond all definition.

How did it really happen? This is a book about the things we know and things we do not know about the self-healing power of the human body. Putting the emphasis on secrets of _marma_ science we have switched over to confirm our efforts to completely understand the scope of this science. This work is a product and a natural result of a total of more than 20 years spent by the author practicing the intricacies of Vedic surgical skill in terms of _marma_ science and _marma_ therapy. As learners and practitioners of surgery know, teaching _marma_ therapy is not so simple because techniques
of marma science must be a labour of concern as the intellectual and emotional efforts put into such endeavours are incredible.

I pay my homage to my spiritual teacher Swami Nigamanand Ji Maharaj for the entire work of marma science and marma therapy which was started after his blessings since 1991. Under the banner of Mrityunjay Mission we are committed to fulfill his dream to serve the suffering humanity through different Vedic medical sciences. I thank my mother and other family members for constant moral support for the Mission and completion of this book and my wife Dr. Mridul Joshi who always encouraged me to complete this work as early as possible.

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Introduction

_Marma_ science and _marma_ therapy is an untouched chapter of Indian Surgery. With the exploration of _marma_ science the whole scenario of Indian Surgery may change in multidimensional approaches. As previously yoga was the means of achieving spiritual gains, and these days yoga is a tool for health promotion among the masses and the best way to combat most of the diseases from which man suffers, in the same way the implementation of _marma_ therapy may help in different medical and surgical lesions in many ways.

Among the hidden sciences (Gupta Vidya) of India, _Marma_ science is the most important. The human body is the basis of all types of activities. One can achieve many mortal and immortal gains from this body. In another reference it is said that the human body is the seat of diseases. Can any individual be able to get any gains from ill health? Is there any means to keep the body healthy? In answer to these questions we can say yes and with the knowledge of _marma_ one can achieve it. According to _Ayurvedic_ texts the _marmas_ are the points, when injured, may be life threatening. _Marmas_ are not superficial landmarks on the body surface but these are deep-seated important physio-anatomical structures. The knowledge of _marma_ is the oldest hidden treasure of Vedic surgical skill. Many ancient saints got the knowledge of _marma_ and practiced this knowledge for the betterment of suffering humanity. In ancient times it was a hidden science and only the king and warriors knew it. Why was it a hidden science? To reply to this question it is important to know what _marma_ is. According to medical definition the specific parts of the body, which are very vulnerable to trauma is known as _marma_. Any trauma to these places may lead to death and many other complications regarding physiological and anatomical functions. These places are known as vital parts and are the source of energy. So
these places should be preserved and should not be exposed to any trauma. Till date the knowledge of marma science is not well known to the practitioners of Ayurveda. So this science cannot flourish like other specialties of Ayurveda.

These marmas are mentioned and discussed in Susruta-samhita as anatomical consideration of different parts of the body. In the chapter on marma, in his commentary on the Susruta-Samhita, Dr. Ghanekar writes—“The definition of marma is discussed in different texts as vital organs. In practice it is also apparent that any trauma to these vital parts may lead to death. It is also truth in reference to the heart and brain. Trauma to these parts may lead to loss of vitality so these parts are known as vital parts. The description of marma is an important part of Ayurvedic anatomy. There is no doubt that there is no proper assessment of the importance of these parts. But there is a very descriptive discussion of many body parts available in this chapter, which are not discussed earlier”. (author’s translation from BG Ghanekar’s Commentary on the Susruta Samhita).

Marma science is discussed in Susruta-Samhita chapter 6, in reference to anatomical consideration of the body parts. These vital points (marmas) are the source of energy so they should be protected very well during any surgical intervention or procedure. A number of neurological problems are discussed in different Ayurvedic texts. Most of these neurological problems come under the heading of vata roga. These vata disorders (80 types) can be treated by marma therapy successfully. Apart from this, if the required procedures described in ancient texts are applied on those points in the proper way, then the body becomes healthy and long life can be achieved. One can get rid of and be free from different curable and incurable diseases.

Ancient rishis, the experts of marma knowledge, developed the marma science and therapy for suffering humanity and for those people who are engaged in the activities of service to humanity and are seekers of achieving the higher state of consciousness. Persons engaged in higher spiritual practices cannot practice yoga, pranayama and other physical practices to keep their body fit due to their special
Marma Science and Principles of Marma Therapy

life style. They can, however, attain the same results and enjoy a similar outcome with marma therapy, which enables them to attain physical well-being, mental calmness, spiritual gains and self-realization.

Whereas, on one hand, physical and spiritual gains are possible through marma science, on the other hand the misuse of marma science may be fatal. Any unprecedented efforts may lead to complication and adverse effects or death; therefore the marma science was obscure and hidden for a long period of thousands of years. In ancient times, except for the experts of marma science it was taught and exposed only to the king, his army chief and warriors. This was the main aim of obscuring the marma science. In the present times, with due precaution, this hidden treasure of Vedic surgical skill can help greatly to relieve the suffering of humanity.

This author, because of his tremendous experience, was inspired to write this book on marma science and principles of marma therapy. It is supposed to be an extraordinary method of healing in many neurological and orthopaedic surgical and non-surgical lesions. Many traumatic bony lesions, soft tissue lesions and nerve lesions can also be treated by this therapy. Thousands of patients with surgical disorders have been treated and relieved through marma therapy in the Government Ayurvedic College, Gurukul Kangri, Haridwar, since 1993. The results of marma therapy are amazing and encouraging. The study of different aspects of marma therapy and its scientific presentation is one of the aims of practicing the therapy. Just as today yoga is well recognized by the scientist, world health organization and the general population, in the same way the hidden treasure of Vedic surgical skill in terms of marma therapy is ready to cope with the challenge of present times as a non-medicinal or non-surgical option.

It was a coincidence in 1991 October. There was an episode of earthquake in the hills of Himalayas near Gangotri. I was a member of one of the earthquake relief doctors’ team. Hundreds of people died during this incident and thousands were injured. Our team worked with the injured and experienced satisfaction in the service of the injured in remote areas. After completing the work in these remote
hills of the Himalayas our team returned to the headquarters. During the return journey from the Himalayan hills we met with Swami Nigamananada Ji Maharaj who made arrangements for our food in his destroyed ashram and appreciated our services and gave me a book about oriental medicine, with blessings, and said to me that it will be of interest to me in the future. After reading this book I was inspired for this work.

It is only by the grace of God that I was inspired towards this marma science and therapy. The credit of this work goes to my learned teachers of Ayurveda and my spiritual teacher, Swami Nigamananada Ji Maharaj.

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Section One

FUNDAMENTALS OF MARMA SCIENCE
1

Vedic Foundation and Historical Background

The history of surgery in India dates back to the Vedas in which transplantation of head, amputation of legs and its replacement by iron legs have been cited, as performed by the divine twins Asvini Kumaras. The *Susruta Samhita* is the oldest available text on surgery in the world, dating back to a time between 300 to 3000 BC. Actually whatever we know about ancient Indian surgery was not possible without the preservation of *Susruta Samhita*. Certainly we would know almost nothing about ancient Indian surgery except through subjects discussed in the *Susruta Samhita*. This text not only represented the embodiment of surgical knowledge of the past millennia, but also was much ahead of the times in expounding and practising the surgical principle; the validity of this truth is realized today.

The most significant achievement of ancient Indian surgery lies in the fact that surgery was elevated from a manual art to an academic discipline and a superior area of expertise amongst the eight disciplines of *Ayurveda*. Susruta was the first person to provide a conceptual framework to the principles and practice of surgery in ancient India.

One of the oldest *Ayurvedic* texts, *Susruta Samhita* deals, among other subjects, with medical diseases, but it is basically a surgical text. It deals with anatomy, pathology, toxicology and diseases of eyes, ear, nose and throat, obstetrics and even medical ethics. Maharshi Susruta was the first to mention methods of dissection. Susruta’s concept of plastic surgery is the basis of modern plastic surgery.

According to Susruta, there are 107 vital points in the body, which are the *marmas* and 700 blood vessels, 300 bones, 400 ligaments and 500 muscles. The *marmas* are divided into five categories, pertaining to different body tissues, one of them blood vessel (*sira*), which is the most important of the five. Any injury to these can be fatal also, and so there is a description of *siras* and what should be avoided during blood-letting or *sira-vedhana*, for the purpose of protecting the *marmas*, as precautionary measures are very important.
Marma Science and Principles of Marma Therapy

Sira-vedhana is a major para-surgical procedure, described in Susruta Samhita. In healthy state all three doshas (vata, pitta and kapha) perform the physiological function. In pathological state vitiated doshas can produce many diseases through these siras. There is no clear-cut distinction about the carriage of particular dosha by these blood vessels, but there may be regional predominance of dosha. For the management of different contagious, infective, inflammatory and surgical diseases, siravedhana is the main treatment procedure.

According to Susruta, siras are 700 in number, and are of the following type: vatavaha sira, pittavaha sira, kaphavaha sira and raktavaha sira. All siras originate from the umbilicus, from where they travel upward, downward and in oblique directions. It is said that all the siras (blood vessels) are linked with the umbilicus. The prana is also based on umbilicus. The main siras are ten in number. The siras related with the places of vata and carrying the vata dosha are 175 in number. The siras related with the places of pitta and carrying the pitta dosha are 175 in number. The siras related with the places of kapha and carrying the kapha dosha are 175 in number. The siras related with the places of rakta especially liver and spleen are also 175 in number.

In one leg, 25 vatavahi siras are present. It is the same in the other leg and both arms. In thorax and abdomen 34 vatavahi siras are present; eight of them are present in the anus and penis. Two siras are in each flank; six are in the back, six in abdomen and ten are present in the thorax. There are 41 siras present in the region above the clavicle, fourteen of them are present in the neck, four in the ears, nine in the tongue, six in the nose and eight are present in the eyes. The total number of vatavaha siras is 175. The remaining three other main types of siras, follow the same pattern, except in the eyes where pittavahi siras are 10 in number and in the ears these are two in number.

According to Susruta one hundred siras are present in one leg. Out of them, one jaladhara and three internal ones, two urvis and one lohitaksa, should not be punctured. The same in the other leg and two arms - thus these sixteen siras in extremities should be avoided for venasection and surgical operations. There are thirty two siras present in the pelvis; out of them, eight should be avoided for blood letting and surgical operation-vitapa (two in each side) and similarly katikataruna (two in each side). Eight are in each side; of them one going upwards on each side and two in parsvasandhi should be avoided.
Twenty four siras are situated in the back on both sides of the vertebral column; out of them, two vrihati siras going upwards on each side should be avoided for venasection and surgical operations.

The same numbers of siras are in the abdomen; out of them two on both sides of the hair-line above penis should be avoided. Forty siras are situated in the thorax, out of them fourteen are avoidable: two in the heart, stanamula two each side; stanarohita two each side, apalapa and apastambha one on each side. There are twenty two siras present in the back, abdomen and thorax which are to be avoided for blood letting and surgical operation.

One hundred and sixty four siras are situated in the region above the clavicles; fifty six are present in the neck, out of them eight (matrkaś), four (two nila and two manya) marmas, apart from two each in krikatika and vidhura - thus sixteen siras in the neck are non-penetrable and should be avoided for blood letting and surgical operation; on each side of the jaw are eight, of which sandhidhamaniś, two on each side, also should be avoided.

Thirty six siras are situated in the tongue of which sixteen siras are situated beneath; out of them, two each carrying taste and speech should be avoided for blood letting and surgical operation. Twenty four siras are in the nose, out of them four should be avoided and also one in the palate’s soft segment; in both eyes there are thirty eight siras; out of them, one in each apanga should be avoided for blood letting and surgical operation; ten siras are located in the ears of which the sira carrying sound, one in each side, should be avoided for blood letting and surgical operation. Supplying the nose and eyes, there are sixty siras in the forehead; out of them, four at the margin of hair-line, one each in two avartas and one in sthapani should be avoided; there are twelve siras present in the head, out of them two in utksepas, one each in simantas and one in adhipati should be avoided for blood letting and surgical operation. Thus total non-penetrable veins above clavicles are fifty in number.

Susruta mentioned different sira marmas regarding the description of blood letting and venasection. These are described later in this book. It is said that siravedhana is a substitute to surgical procedure. In the process of siravedhana, bloodletting (removal of blood) is required. For this purpose other procedures are also practiced. Other procedures of blood letting are alabu, shring and jalauka. In different diseases, in specific anatomical regions, blood letting from specific blood vessels should be done.
Marma Science and Principles of Marma Therapy

In the same way, as a rapid acting solution, marma therapy was also popular in ancient India, in the time of Ramayana and Mahabharata. The basic knowledge about marma therapy has been discussed extensively in different texts. What are the marmas? And how they are different from Tsubo and acupuncture points? In oriental medicine the Tsubo or vital points are situated in meridians. These points are connected with each other through the meridians. In oriental medicine the results may not be effective sometimes due to missing of the correct Tsubo completely. But in marma therapy these points are described anatomically in the Susruta-Samhita. The chances of missing the point are minimal. It can be said that marma science is more precise and informative than any other oriental science.

India is the native land of Buddhism, from where numerous Buddhist scholars voyaged thousands of miles across the continent. The culture, religion, Ayurvedic medical science and other traditional knowledge also went to South East Asia all the way through the spread of Buddhism along with these Buddhist scholars.

India’s contact with the countries of South East Asia, were mainly through Brahmanism and Buddhism. Before Buddhism, Brahmanism extended throughout the Indian subcontinent. After that, Buddhism flourished in many divergent societies, ranging from the unsettled, undeveloped to well developed and today it is a major religion of the world, especially of South East Asia. The impact of India left its ineffaceable stamp on culture, art, language, science, technology and religion of South East Asia. At that time, the Indian civilization was at its zenith and gripped the subcontinent, and especially South East Asia, before the birth of Jesus Christ. Waves of Indian traders, scholars, intellectuals, soldiers, Brahmins and Buddhist missionaries beat upon South East Asia, in one heave after another. Between the second and fifth centuries A.D., Indian kingdoms governed by Hindu emperors were present in Malaya, Cambodia, Vietnam, Sumatra, Java, Bali and Borneo. In the first century A.D., Kambuja, Syama, Champa and Malaya were under the influence of Hinduism. During that period, the Chinese named this region Funana. All emperors of this region were named by the lineage (Verma) of the south Indian kings: – Chandra Verma, Jaya Verma, Rudra Verma.

In the accounts of historians, travelers and pilgrims from foreign countries may be found mention of medical science, as they saw it practised during their visit to this country. Thus we learn from the
accounts of Houen Tsang and Fa Hian that charitable hospitals, dispensaries and *Punyasalas* (house of charity) were common in the Indian subcontinent at that time.

About 2500 years ago, *Buddhism* was born in India as a philosophy; since then it has been transformed into a religion and has traveled to distant lands of the Indian subcontinent, as well as China and Japan. *Ayurveda*, the science of life has affected the whole of South East Asia. *Ayurveda* also became enriched by the traditional knowledge of South East Asia. A number of medicinal plants are incorporated in the *Ayurvedic* pharmacopoeia, from other parts of the subcontinent and South East Asia. Some specialized treatment techniques being practised and popularized in India as well as in South East Asia, *marma vigyana, sira veethana, pancha karma* and herbal remedies- are the most accepted therapy for numerous body ailments without any adverse effect. Many Indian techniques were popularized in different parts of the Indian subcontinent and South East Asia in altered or transformed shape.

*Ayurveda* has played a key role in alternative/oriental/ traditional medical science. It is one of the oldest methods of treatment in the world. Oriental/ traditional medical system as known today in South East Asia was developed in India and China and came into existence through Buddhism in this region. It is a well known fact that Buddhism and *Ayurveda* had a close relationship. Many Buddhist scholars were engaged in the study of *Ayurveda* and they set up *Ayurvedic* schools of their own. The teaching and training of *Ayurvedic* medicine and surgery was widely popularized in the Indian subcontinent before the regime of Lord Buddha. Surgery was widely practiced for the elimination of a number of diseases. It is documented in *Mohavagga* that Jivak the personal physician of Lord Buddha was engaged in high profile surgical practice including cranial surgery.

One of the persuasive causes of progressive profligacy in the knowledge and practice of surgery was the rapid spread of Buddhism in India. Any surgical interference was claimed as violence at that time. Though Buddha sanctioned the use of surgical interference with lancet in preferred cases, in doubtful cases he prohibited the use of instruments in the treatment of even surgical disease. No science can flourish without the support of the governing body of the day. At the time of Lord Buddha, the government was highly influenced by religion, so at that time, surgical practice was declared illegal. As Buddhism flourished, the development of *rasa-sastra* (alchemy) took place rapidly. Efficacy of these herbo-mineral preparations was
excellent in different curable and incurable diseases. But there was a breach in the medical practice, due to the ban on surgery. The scholars of surgery diverted their talent in other directions and they developed different kinds of healing techniques like marmavigyan, sira-vedhana and karna-vedhana, by which instant relief was possible.

In this book, apart from the science and practice of marmavigyan, we shall also see the relationship between this marmavigyan and the other ancient, and now very popular science of India, Yoga science, as also its comparison to practices in Oriental medicine.
Distribution and Description of Marma Points in the Human Body

including the effect of trauma on Marma points

The juncture of mansa, sira, snayu, asthi and sandhi is known as marma. It is also known as jeevasthana and pranayatana. This concept of marma is the basis of all martial arts and acupuncture/acupressure anesthesia. According to Susruta Samhita, due to injury of mansa marma, there may be loss of touch sensation. By using this information, local anesthesia can be produced by irritating the mansa marma.

According to Maharsi Susruta there are 107 marmas in the human body. These are very important vital places. Any injury to these parts may lead to severe pain, disability, loss of function, loss of sensation (anesthesia) and death. According to anatomical consideration marmas can be divided into mansa-martha, sira-martha, snayu-martha, sandhi-martha, and asthi-martha (respectively, marma of muscle, blood vessel, ligament, joint and bone). On the basis of properties they can be categorized into saumya, vayavya, agneya and saumyagneya marmas. According to site, marmas are situated at udara (thorax and abdomen), prishtha (back), shakha (extremities) and urdhwajatru (neck and head) region.

There are eleven marma points in one leg. The same number is present in the other leg. So, these are a total of forty-four marma points including both the upper and lower extremities. There are twelve marma points in the thorax and abdomen. Fourteen marma points are present in the back. Thirty-seven marma points are located above the clavicular region (neck and head).

In the lower extremities kshipra (2), talahridaya (2), kurcha (2), kurchasira (2), gulpha (2), indravasti (2), janu (2), anl (2), urvi (2), lohitaksha (2) and vitapa (2) are situated. In the upper extremity, in the place of vitapa there is kakshadhatra marma, and in the place of gulpha there is manibandha.

In the abdomen and thorax, guda, vasti, nabhi, hridaya, stanamula (2), stanarohita (2), apastambha (2), apalapa (2) are present. These are a total of twelve marmas. In the back katikatarun (2), kukundara (2), nitamba (2), parsva sandhi (2), vritati (2),
amsaphalaka (2), amsa (2) are located. There are a total of fourteen marmas present in the back.

In supraclavicular region dhamani (4) i.e. nila (2), manya (2), matrika (8), krikatika (2), vidhura (2), phana(2), apanga(2), avarta (2), utkshepa (2), samkha (2), sthapani (1), simanta (5), sringataka (4) and adhipati (1) are situated. There are a total of 37 marma points in the supraclavicular region.

Talahridaya, indravasti, guda and stanarohit marmas are mansa marma (muscular vital point).

Neela (2), manya (2), matrika (8), sringataka (4), apanga (2), sthapani(1), phana(2), stanamula (2), apalapa (2), apastambha (2), hridaya (1), nabhi (1), parsvasandhi (2), vrihati (2), lohitaksha (4) and urvi (4) are sira marma (vascular vital point)

Ani (4), vitapa (2), kakshadhara(2), kurca (4), kurcasira (4), vasti (1), kshipra (4), amsa (4), vidhura (2), utkshepa (2), are snayu marma (ligamental vital point)

Katikataruna (2), nitamba (2), amsaphalaka (2), samkha (2), are asthi marma (bony vital point).

Janu (2), kurpara (2), simanta (5) adhipati (1), gulpha (2), manibandha (2), kukundara (2), avarta (2) and krikatika (2) are sandhi marma (articolar vital point).

These marmas can be categorized in to 5 groups according to the effect of trauma on it.

1. Sadya pranahara (fatal) marma -19
2. Kalantrara pranahara (delayed fatal) marma-33
3. Vishalyaghna (fatal after removal of foreign body) marma- 3
4. Vaikalyakara (disabling) marma-44
5. Rujakara (painful) marma- 8

Shringataka (4), adhipati (1), samkha (2), matrika (8), guda (1), hridaya (1), vasti (1), nabhi (1): these 19 vital points are fatal. Any injury to these points may lead to death.

Stanamula (2), stanarohita (2), apalapa (2), apastambha (2), simanta (5), talahridaya (4), kshipra (4), indravasti (4), katikataruna (2), parsvasandhi (2), vrihati (2) and nitamba (2) are 33 vital points which are delayed fatal. Any injury to these points may cause fatality, though after delay. This delay may be for a duration of 15 to 30 days. This interregnum can be used for prevention of fatality, but again only through the use of marma therapy.

Utkshepa (2) and sthapani (1) marma are fatal after removal of foreign body. The foreign body being referred to is the cause of injury, like an arrowhead, a bullet or any other implement.
Lohitaksha (4), janu (2), urvi (2), kurca (4), vitapa (2), kurpara (2), kukundara (2), kakshadhara (2), vidhura (2), krikatika (2), amsa (2), amsaphalaka (2), apanga (2), neela (2), manya (2), phana (2), avarta (2) these 44 vital points are disabling. Any injury to these points may lead to disability.

Gulpha (2), manibandha (2), kurcasira (4), these eight points are painful. Any injury to these points may lead to severe pain.

Marma is the combination of mansa, sira, snayu, asthi and sandhi. Naturally these are life spots. According to Vagabhatta those places where any injury may lead to different kinds of pain and tremors are known as marmas.

Fatal marmas are agneya in nature. Injury to these points may lead to sudden decline in vitality and death. Delayed fatal marmas are saumyagneya: there is sudden decline in agneya property but there is insidious decline in saumya property; so there is delay in fatality and death takes place after some time. In cases where fatality occurs after removal of the foreign body the marmas are vayavya in nature. After injury there is cessation of air and removal of foreign body may lead to sudden loss of internal air and death. But if the foreign body is not removed and the wound heals spontaneously and the foreign body falls off by itself then the effect is not fatal.

Disabling marmas are saumya in nature. Soma is stable and cold. It protects life. Any injury to these parts is not fatal but may lead to disability. Painful marmas are combination of agni and vayu properties. Any injury to these points may lead to severe pain.

It has been said that all the five basic body elements are involved in the marmas. In the fatal points vein, ligament, muscle, bone and joint,- all are combined. When all these fractions are present in less quantity or one fraction is absent then it is known as delayed fatal marma. If two fractions are absent it is known as the marma which is fatal after removal of foreign body. If three fractions are absent then these points are known as disabling marmas. If only one fraction is available then these points are known as painful marmas.

The above discussion shows how important and vital the marmas points are in the human body.

Table 1: Description of marma points in the human body

<table>
<thead>
<tr>
<th>Name</th>
<th>No.</th>
<th>Location</th>
<th>Type</th>
<th>Resultant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kshipra</td>
<td>2</td>
<td>Upper Extr. Ligament</td>
<td>Delayed Fatal</td>
<td>(First intermeta carpal ligament)</td>
</tr>
<tr>
<td>Kshipra</td>
<td>2</td>
<td>Lower Extr. Ligament</td>
<td>Delayed Fatal</td>
<td>(First intermeta-tarsal ligament)</td>
</tr>
<tr>
<td>Name</td>
<td>No.</td>
<td>Location</td>
<td>Type</td>
<td>Resultant</td>
</tr>
<tr>
<td>-------------</td>
<td>-----</td>
<td>--------------</td>
<td>-------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td><strong>Talahridaya</strong></td>
<td>2</td>
<td>Upper Ex.</td>
<td>Muscle</td>
<td>Delayed Fatal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Palmer aponeurosis)</td>
<td></td>
</tr>
<tr>
<td><strong>Talahridaya</strong></td>
<td>2</td>
<td>Lower Ex.</td>
<td>Muscle</td>
<td>Delayed Fatal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Long planter ligament)</td>
<td></td>
</tr>
<tr>
<td><strong>Kurca</strong></td>
<td>2</td>
<td>Upper Ex.</td>
<td>Ligament</td>
<td>Disabling</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Carpo-metacarpal and intercarpal ligament)</td>
<td></td>
</tr>
<tr>
<td><strong>Kurca</strong></td>
<td>2</td>
<td>Lower Ex.</td>
<td>Ligament</td>
<td>Disabling</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Tarso-metatarsal and intertarsal Ligament)</td>
<td></td>
</tr>
<tr>
<td><strong>Kurcasira</strong></td>
<td>2</td>
<td>Upper Ex.</td>
<td>Ligament</td>
<td>Painful</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Lateral ligaments of the wrist joint)</td>
<td></td>
</tr>
<tr>
<td><strong>Kurcasira</strong></td>
<td>2</td>
<td>Lower Ex.</td>
<td>Ligament</td>
<td>Painful</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Lateral ligaments of the ankle joint)</td>
<td></td>
</tr>
<tr>
<td><strong>Manibandha</strong></td>
<td>2</td>
<td>Upper Ex.</td>
<td>Joint</td>
<td>Painful</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Wrist joint)</td>
<td></td>
</tr>
<tr>
<td><strong>Gulpha</strong></td>
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<td>Lower Ex.</td>
<td>Joint</td>
<td>Painful</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Ankle joint)</td>
<td></td>
</tr>
<tr>
<td><strong>Indravasti</strong></td>
<td>2</td>
<td>Upper Ex.</td>
<td>Muscle</td>
<td>Delayed Fatal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Origin of Palmaris longus muscle)</td>
<td></td>
</tr>
<tr>
<td><strong>Indravasti</strong></td>
<td>2</td>
<td>Lower Ex.</td>
<td>Muscle</td>
<td>Delayed Fatal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Calf muscles)</td>
<td></td>
</tr>
<tr>
<td><strong>Kurpara</strong></td>
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<td>Upper Ex.</td>
<td>Joint</td>
<td>Disabling</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Elbow joint)</td>
<td></td>
</tr>
<tr>
<td><strong>Janu</strong></td>
<td>2</td>
<td>Lower Ex.</td>
<td>Joint</td>
<td>Disabling</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Knee joint)</td>
<td></td>
</tr>
<tr>
<td><strong>Ani</strong></td>
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<td>Upper Ex.</td>
<td>Ligament</td>
<td>Disabling</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Tendon of biceps muscle)</td>
<td></td>
</tr>
<tr>
<td><strong>Ani</strong></td>
<td>2</td>
<td>Lower Ex.</td>
<td>Ligament</td>
<td>Disabling</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Tendon of quadriceps femoris muscle)</td>
<td></td>
</tr>
<tr>
<td><strong>Urvi</strong></td>
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<td>Upper Ex.</td>
<td>Blood Vessel</td>
<td>Disabling</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>(Brachial artery, Bacilic vein)</td>
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</tr>
<tr>
<td><strong>Urvi</strong></td>
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<td>Lower Ex.</td>
<td>Blood Vessel</td>
<td>Disabling</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Femoral vessels)</td>
<td></td>
</tr>
<tr>
<td><strong>Kaksadhara</strong></td>
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<td>Ligament</td>
<td>Disabling</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>(Brachial plexus)</td>
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<tr>
<td><strong>Vitapa</strong></td>
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<td>Abdomen</td>
<td>Ligament</td>
<td>Disabling</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Inguinal canal/ Ligament)</td>
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<tr>
<td><strong>Lohitaksa</strong></td>
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<td>Upper Ex.</td>
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<td>Disabling</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>(Axillary vessels)</td>
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<tr>
<td><strong>Lohitaksa</strong></td>
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<td>Disabling</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>(Femoral vessels)</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>No.</td>
<td>Location</td>
<td>Type</td>
<td>Resultant</td>
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<tr>
<td>--------------</td>
<td>-----</td>
<td>--------------</td>
<td>---------------</td>
<td>-----------------</td>
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<tr>
<td>Guda</td>
<td>23</td>
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<td>Muscle</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>(Anal canal and anus)</td>
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</tr>
<tr>
<td>Vasti</td>
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<tr>
<td></td>
<td></td>
<td>(Urinary bladder)</td>
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<td>Nabhi</td>
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<td>Blood Vessel</td>
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<tr>
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<td>(Umbilicus)</td>
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<tr>
<td>Stanamula</td>
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<td>Chest</td>
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<tr>
<td></td>
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<td>(Internal mammary vessels)</td>
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<td>Hridaya</td>
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<td>Chest</td>
<td>Blood Vessel</td>
<td>Fatal</td>
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<tr>
<td></td>
<td></td>
<td>(Heart)</td>
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<td></td>
</tr>
<tr>
<td>Stanarohita</td>
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<td>Chest</td>
<td>Muscle</td>
<td>Delayed Fatal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Lower portion of Pectoralis major muscle)</td>
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<tr>
<td>Apalapa</td>
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<td>Chest</td>
<td>Blood Vessel</td>
<td>Delayed Fatal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Lateral thoracic and subscapular vessels)</td>
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<tr>
<td>Apastambha</td>
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<td>Chest</td>
<td>Blood Vessel</td>
<td>Delayed Fatal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Two bronchii)</td>
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<td></td>
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<tr>
<td>Katikataruna</td>
<td>31</td>
<td>Back</td>
<td>Bone</td>
<td>Delayed Fatal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Sciatic notch)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitamba</td>
<td>32</td>
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<td>Bone</td>
<td>Delayed Fatal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Ala of the ileum/Ischial tuberosity)</td>
<td></td>
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</tr>
<tr>
<td>Kukundara</td>
<td>33</td>
<td>Back</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>(Sacrolilac joints)</td>
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<td>Parsvasandhi</td>
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<td>Delayed Fatal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Common iliac vessels/ renal angle)</td>
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<td>Vrihati</td>
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<td>Blood Vessel</td>
<td>Delayed Fatal</td>
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<tr>
<td></td>
<td></td>
<td>(Subscapular &amp; transverse cervical arteries)</td>
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<td>Amsaphalaka</td>
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<td>Back</td>
<td>Bone</td>
<td>Disabling</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Spine of the Scapula)</td>
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<tr>
<td>Amsa</td>
<td>37</td>
<td>Back</td>
<td>Ligament</td>
<td>Disabling</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Coraco-humoral, gleno-humoral ligament/ Trapezius muscle)</td>
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<tr>
<td>Krikatika</td>
<td>38</td>
<td>Neck</td>
<td>Joint</td>
<td>Disabling</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Atlanto-occipital articulation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nila/manya</td>
<td>39</td>
<td>Neck</td>
<td>Blood Vessel</td>
<td>Disabling</td>
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<tr>
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<td>(Blood vessels of the neck)</td>
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<td></td>
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<tr>
<td>Matrika</td>
<td>40</td>
<td>Neck</td>
<td>Blood Vessel</td>
<td>Fatal</td>
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<tr>
<td></td>
<td></td>
<td>(Blood vessels of the neck)</td>
<td></td>
<td></td>
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<tr>
<td>Vidhura</td>
<td>41</td>
<td>Head</td>
<td>Ligament</td>
<td>Disabling</td>
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<tr>
<td></td>
<td></td>
<td>(Posterior auricular ligament/ Vessels)</td>
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<tr>
<td>Phana</td>
<td>42</td>
<td>Head</td>
<td>Blood Vessel</td>
<td>Disabling</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Kiesselbach’s plexus in little’s area/Olfactory region of the nose)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>No.</td>
<td>Location</td>
<td>Type</td>
<td>Resultant</td>
</tr>
<tr>
<td>-----------</td>
<td>-----</td>
<td>----------</td>
<td>------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td><strong>Apanga</strong></td>
<td>2</td>
<td>Head</td>
<td>Blood Vessel</td>
<td>Disabling (Zygomatico-temporal vessels)</td>
</tr>
<tr>
<td><strong>Avarta</strong></td>
<td>2</td>
<td>Head</td>
<td>Joint</td>
<td>Disabling (Junction of the frontal, molar and sphenoid bone)</td>
</tr>
<tr>
<td><strong>Utksepa</strong></td>
<td>2</td>
<td>Head</td>
<td>Ligament</td>
<td>Fatal after f.b. (Temporal muscle and fascia)</td>
</tr>
<tr>
<td><strong>Samkha</strong></td>
<td>2</td>
<td>Head</td>
<td>Bone</td>
<td>Fatal (Temples)</td>
</tr>
<tr>
<td><strong>Sthapani</strong></td>
<td>1</td>
<td>Head</td>
<td>Blood Vessel</td>
<td>Fatal after f.b. (Nasal arch of the frontal vein)</td>
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<tr>
<td><strong>Simanta</strong></td>
<td>5</td>
<td>Head</td>
<td>Joint</td>
<td>Delayed Fatal (Cranial sutures)</td>
</tr>
<tr>
<td><strong>Sringataka</strong></td>
<td>4</td>
<td>Head</td>
<td>Blood Vessel</td>
<td>Fatal (Cavernous and inter-cavernous sinuses)</td>
</tr>
<tr>
<td><strong>Adhipati</strong></td>
<td>1</td>
<td>Head</td>
<td>Joint</td>
<td>Fatal (Torcular herophil)</td>
</tr>
</tbody>
</table>

**Table 2: Detail of effect of trauma on vital points (marma)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kshipra</strong></td>
<td>Death due to convulsions (First intermeta carpal ligament)</td>
</tr>
<tr>
<td><strong>Kshipra</strong></td>
<td>Death due to convulsions (First intermeta-tarsal ligament)</td>
</tr>
<tr>
<td><strong>Talahridaya</strong></td>
<td>Death due to severe pain (Palmer aponeurosis)</td>
</tr>
<tr>
<td><strong>Talahridaya</strong></td>
<td>Death due to severe pain (Long planter ligament)</td>
</tr>
<tr>
<td><strong>Kurca</strong></td>
<td>Wrist drop and tremors (Carpo-metacarpal and intercarpal ligament)</td>
</tr>
<tr>
<td><strong>Kurca</strong></td>
<td>Foot drop and tremors (Tarso-metatarsal and intertarsal Ligament)</td>
</tr>
<tr>
<td><strong>Kurcasira</strong></td>
<td>Pain and Swelling (Lateral ligaments of the wrist joint)</td>
</tr>
<tr>
<td><strong>Kurcasira</strong></td>
<td>Pain and Swelling (Lateral ligaments of the ankle joint)</td>
</tr>
<tr>
<td><strong>Manibandha</strong></td>
<td>Pain, wrist drop and deformity (Wrist joint)</td>
</tr>
<tr>
<td><strong>Gulpha</strong></td>
<td>Pain, restricted ankle movement, deformity (Ankle joint)</td>
</tr>
<tr>
<td><strong>Indravasti</strong></td>
<td>Excessive hemorrhage and death (Origin of Palmaris longus muscle)</td>
</tr>
</tbody>
</table>

27
<table>
<thead>
<tr>
<th>Name</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Indravasti</td>
<td>Excessive hemorrhage and death</td>
</tr>
<tr>
<td>(Calf muscles)</td>
<td></td>
</tr>
<tr>
<td>13. Kurpara</td>
<td>Non functioning &amp; deformity of forearm</td>
</tr>
<tr>
<td>(Elbow joint)</td>
<td></td>
</tr>
<tr>
<td>14. Janu</td>
<td>Non functioning &amp; deformity of leg</td>
</tr>
<tr>
<td>(Knee joint)</td>
<td></td>
</tr>
<tr>
<td>15. Ani</td>
<td>Excessive swelling and dysfunction of limb</td>
</tr>
<tr>
<td>(Tendon of biceps muscle)</td>
<td></td>
</tr>
<tr>
<td>16. Ani</td>
<td>Excessive swelling and dysfunction of limb</td>
</tr>
<tr>
<td>(Tendon of quadriceps femoris muscle)</td>
<td></td>
</tr>
<tr>
<td>17. Urvì</td>
<td>Haemorrhage and swelling</td>
</tr>
<tr>
<td>(Brachial artery, Bacular vein)</td>
<td></td>
</tr>
<tr>
<td>18. Urvì</td>
<td>Haemorrhage and swelling</td>
</tr>
<tr>
<td>(Femoral vessels)</td>
<td></td>
</tr>
<tr>
<td>19. Kaksadhara</td>
<td>Paralysis (Quadriplegia)</td>
</tr>
<tr>
<td>(Brachial plexus)</td>
<td></td>
</tr>
<tr>
<td>20. Vitapa</td>
<td>Impotency and decreased semen</td>
</tr>
<tr>
<td>(Inguinal canal/ Ligament)</td>
<td></td>
</tr>
<tr>
<td>21. Lohitaksa</td>
<td>Excessive bleeding, paralysis and death</td>
</tr>
<tr>
<td>(Axillary vessels)</td>
<td></td>
</tr>
<tr>
<td>22. Lohitaksa</td>
<td>Excessive bleeding, paralysis and death</td>
</tr>
<tr>
<td>(Femoral vessels)</td>
<td></td>
</tr>
<tr>
<td>23. Guda</td>
<td>Sudden death</td>
</tr>
<tr>
<td>(Anal canal and anus)</td>
<td></td>
</tr>
<tr>
<td>24. Vasti</td>
<td>Sudden death</td>
</tr>
<tr>
<td>(Urinary bladder)</td>
<td></td>
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<tr>
<td>25. Nabhi</td>
<td>Sudden death</td>
</tr>
<tr>
<td>(Umbilicus)</td>
<td></td>
</tr>
<tr>
<td>26. Stanamula</td>
<td>Pleural effusion, cough, dyspnoea (Internal mammary vessels) and death</td>
</tr>
<tr>
<td>27. Hrīdāya (Heart)</td>
<td>Sudden death</td>
</tr>
<tr>
<td>28. Stanarohita</td>
<td>Hemothorax, cough, dyspnoea (Lower portion of Pectoralis major muscle)</td>
</tr>
<tr>
<td>(Lateral thoracic and subscapular vessels)</td>
<td></td>
</tr>
<tr>
<td>29. Apalapa</td>
<td>Pyaemia, septicemia and death</td>
</tr>
<tr>
<td>(Lateral thoracic and subscapular vessels)</td>
<td></td>
</tr>
<tr>
<td>30. Apastambha</td>
<td>Pneumothorax, cough, dyspnoea and death</td>
</tr>
<tr>
<td>(Two bronchii)</td>
<td></td>
</tr>
<tr>
<td>31. Katikataruna</td>
<td>Excessive hemorrhage, severe anemia and death</td>
</tr>
<tr>
<td>(Sclatic notch)</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Effect</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>32. Nitamba</td>
<td>Atrophy of lower extremity and death (Ala of the ileum/Ischial tuberosity)</td>
</tr>
<tr>
<td>33. Kukundara</td>
<td>Loss of sensation and locomotive activity (Sacroiliac joints)</td>
</tr>
<tr>
<td>34. Parsvasandhi</td>
<td>Renal injury, retroperitoneal haemorrhage and death (Common iliac vessels/renal angle)</td>
</tr>
<tr>
<td>35. Vrihati</td>
<td>Haemorrhagic complications &amp; death</td>
</tr>
<tr>
<td>(Subscapular &amp; transverse cervical arteries)</td>
<td></td>
</tr>
<tr>
<td>36. Amsaphalaka</td>
<td>Numbness and paresis of upper extremity (Spine of the Scapula)</td>
</tr>
<tr>
<td>37. Amsa</td>
<td>Frozen shoulder (Coraco-humoral, gleno-humoral ligament/ Trapezius muscle)</td>
</tr>
<tr>
<td>38. Krikatika</td>
<td>Instability of head, continuous movement of head (Atlanto-occipital articulation)</td>
</tr>
<tr>
<td>39. Nila/manya</td>
<td>Aphonia, dysphonia &amp; loss of taste (Blood vessels of the neck)</td>
</tr>
<tr>
<td>40. Matrika</td>
<td>Sudden death (Blood vessels of the neck)</td>
</tr>
<tr>
<td>41. Vidhura</td>
<td>Deafness (Posterior auricular ligament/ Vessels)</td>
</tr>
<tr>
<td>42. Phana</td>
<td>Anosmia (loss of smell sensation) (Kiesselbach’s plexus in little’s area/Olfactory region of the nose)</td>
</tr>
<tr>
<td>43. Apanga</td>
<td>Blindness, Diminution of vision (Zygomatico-temporal vessels)</td>
</tr>
<tr>
<td>44. Avarta</td>
<td>Loss of vision, Diminution of vision (Junction of the frontal, molar and sphenoid bone)</td>
</tr>
<tr>
<td>45. Utksepa</td>
<td>Death if foreign body is removed (Temporal muscle and fascia)</td>
</tr>
<tr>
<td>46. Samikha</td>
<td>Sudden death (Temples)</td>
</tr>
<tr>
<td>47. Sthapani</td>
<td>Death if foreign body is removed (Nasal arch of the frontal vein)</td>
</tr>
<tr>
<td>48. Simanta</td>
<td>Madness, excitability and death (Cranial sutures)</td>
</tr>
<tr>
<td>49. Sringataka</td>
<td>Sudden death (Cavernous and inter-cavernous sinuses)</td>
</tr>
<tr>
<td>50. Adhipati</td>
<td>Sudden death (Torcular herophilus)</td>
</tr>
</tbody>
</table>
SOME IMPORTANT MARMA POINTS IN HUMAN BODY
Marma Science and Principles of Marma Therapy

Marma according to site/location (no.)

- Total Marma: 107
- Upper Extremity: 22
- Lower Extremity: 22
- Chest & Abdomen: 12
- Back: 14
- Above Neck: 37

Percentage of Marma according to site/location:

- Upper Extremity: 34%
- Lower Extremity: 13%
- Chest & Abdomen: 21%
- Back: 21%
- Above Neck: 21%
Marma Science and Principles of Marma Therapy

Percentage wise Marma quality

[Chart showing percentages: 7%, 18%, 31%, and 3%]

Marma quality

[Bar chart showing total Marma, fetal, delayed fetal, after F.B removal, disabling, and painful]

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3

Fundamentals of Marma Science and Therapy

The human being is a finite creature in an infinite cosmos. According to Vedanta principle the absolute cosmos is conceptually limitless. It can be marked as infinite-eternal, eternal-infinite and cannot be assessed in external and absolute. In fact, as per the quotation ‘yat pinde tat brahmande’ all properties of the absolute cosmos are inherent in this human body. One aspect of these inherent powers of self-healing is demonstrated by our rishis as Marma Science.

Basically Ayurveda strives to keep the body healthy and prevent illness. Illness is the condition when the body gets tired excessively or weak and this condition affects the normal physiological functions of the body. A number of suitable measures are advocated in Ayurveda to prevent the illness and to keep the body healthy and fit.

As previously yoga was the means of achieving spiritual gains, nowadays yoga is a tool for health promotion among the masses. In the same way the implementation of marma chikitsa may help in different surgical lesions. One of the most significant achievements of ancient Indian surgery lies in the fact that surgery was elevated from a manual art to an academic discipline and a superior area of expertise amongst eight disciplines of Ayurveda. Marma chikitsa is the oldest treasure of Indian surgery from the Vedic period. During the Vedic era the knowledge of marma was known to the emperors and warriors. The concept and practice of marma was very popular in those days to achieve the maximum effect when contending with the enemies. During the period of the Buddha the science of marma was transformed into different martial arts.

In Susruta Samhita it is apparent that the knowledge of anatomy and physiology is essential for the exact study of surgical problems by Ayurvedic surgeons. It is important to know that injuries on certain parts of the human body need more consideration. Such parts are known as marmasthana. It is also important to note that those vaidyas who are expert in the anatomy and physiology of the different human organs will never commit mistakes in the management of diseases due to ignorance. Susruta mentioned the condition of attaining the position of visharada only after one attains thorough knowledge of the human body anatomy.
The term *marma* is derived from the Sanskrit dhatu 'mri'—*marma*, that means which causes death or disability. The literary meaning of *marma* is shape, element, life spot, conjugation of different body structures, essence and vital part. According to Ayurvedic definition, the points which are very vulnerable to injuries and may lead to complications or death are considered as *marmas*. It is apparent that there are certain important vital points (places) in the human body, which have hidden, secret and significant energy.

In Ayurveda the concept of *marma* has a vital role. Diseases affecting these vital parts have a bad prognosis. Certainly we can say that the diseases or lesions away from the *marmas* can be treated easily. *Marma* are the seat of *soma*, *vayu*, *teja*, *sattva*, *rajas*, *tama* and *jivatma*. When these places, that is, the *marma* points, get injured there can be a fatal response. Keeping this concept in mind one should try to apply *marma chikitsa* to provide the cure for different body ailments.

**DIAGRAM OF MARMA PROPERTIES**

According to Ayurveda all factors responsible for the body vitiates the *vata*, *pitta* and *kapha*. This vitiation emerges as pathological states in the organs and tissues. *Ayurveda* attempts to check this process in different stages of the vitiation of *doshas*. These stages can be categorized as follows-

- **Samcaya**: (stage of accumulation)
- **Prakopa**: (stage of proliferation)
Marma Science and Principles of Marma Therapy

As previously discussed, marma can be categorized into saumya (kapha), agneya (pitta), vayavya (vayu) and saumyagneya (kapha-pitta). Most of the marma (44) are saumya. Saumyagneya are (33) in number. Agneya are (19) in number and vayavya are (11) in number. The marmas situated in the left side of body are representative of soma (kapha) and the marmas on the right side of the body are representative of surya (pitta). In the state of any illness the predominance of dosha should be kept in mind and the particular side should be treated specially with reference to doshik dominance through marma therapy, so that appropriate stimulation of the marma points will restore the balance of humours and relieve disease.

Marmas are composed of all five basic components (mansa, sira, snayu, asthi, sandhi). Marmas are panchabhautika (prithivi, jala, teja, vayu, akash).

The marmas are composed of mansa (muscle), sira (blood vessels), snayu (ligament and tendons), asthi (bones), and sandhi (joints). It is not compulsory that all these structures may be present collectively at a glance for the composition of one marma. Marmas can be categorized in five groups a) mansa marma b) sira marma c) snayu marma d) asthi marma e) sandhi marma.

According to Vagabhatta there are six types of marma. He has enumerated a sixth group of marma known as dhamani marma.

Before marma therapy one has to determine the actual location of the specific marma. The exact location of marma varies according to an individual, according to the measurement of the body and body parts. The site is described in relation to the bony prominences, joints and other body structures. The distance is described in finger measurement of the individual. The extent of each type of marma is also discussed. The marma points vary in size from that of a pinhead to half a finger (laterally measured) to four fingers, laid laterally, or even the size of the palm.

All marmas can be categorized in five groups, as well as a sixth one as specified by Vagabhatta.

a) Mansa marma (Marmas of muscles)
b) Sira marma (Marmas of blood vessels)
c) Snayu marma (Marmas of ligaments/tendon)
Marma Science and Principles of Marma Therapy

d) Asthi marma (Marmas of bones)
e) Sandhi marma (Marmas of joints)
f) Dhamani marma (Marmas of arteries)

In every marma the structural contents may be different. When there is predominance of muscle tissue, it is known as ‘mansa marma’. Other structural tissues are also present in that particular spot. The same concept is behind the classification or categorization of all the marmas.

The above descriptions state some of the fundamental principles on which marma science and therapy is based.
4

Marma according to Location over the Human Body

The total 107 marmas are distributed all over the body.

<table>
<thead>
<tr>
<th>Marma according to site/location (no.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Marma: 107</td>
</tr>
<tr>
<td>Upper Extremity: 22</td>
</tr>
<tr>
<td>Lower Extremity: 22</td>
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<tr>
<td>Chest &amp; Abdomen: 12</td>
</tr>
<tr>
<td>Back: 14</td>
</tr>
<tr>
<td>Above Neck: 37</td>
</tr>
</tbody>
</table>

Marma of upper extremity – 11x2
1. **Kshipra** 2 - First inter metacarpal ligament
2. **Talahridaya** 2 - Palmer aponeurosis
3. **Kurca** 2 - Carpo-metacarpal and intercarpal ligament
4. **Kurcasira** 2 - Lateral ligaments of the wrist joint
5. **Manibandha** 2 - Wrist joint
6. **Indravasti** 2 - Origin of Palmaris longus muscle
7. **Kurpara** 2 - Elbow joint
8. **Ani** 2 - Tendon of biceps muscle
9. **Urvi** 2 - Brachial artery/ Bacilic vein
10. **Kakshadhara** 2 - Brachial plexus
11. **Lohitaksha** 2 - Axillary vessels

Marma of lower extremity- 11x2
1. **Kshipra** 2 - First inter metatarsal ligament
2. **Talahridaya** 2 - Long planter ligament
3. **Kurca** 2 - Tarso-metatarsal and inter tarsal ligament
4. **Kurcasira** 2 - Lateral ligament of the ankle joint
5. **Gulpha** 2 - Ankle joint
6. **Indravasti** 2 - Calf muscles
7. **Janu** 2 - Knee joint
Marma Science and Principles of Marma Therapy

8. Ani 2 - Tendon of quadriaps femoris
9. Ulvi 2 - Femoral vessels
10. Lohitaksha 2 - Iliac vessels
11. Vitapa 2 - Inguinal ligament/ inguinal canal

Marma of Abdomen and thorax- (12)
1. Guda 1 - Anal canal and anus
2. Vasti 1 - Urinary bladder
3. Nabhi 1 - Umbilicus
4. Hridaya 1 - Heart
5. Stanamula 2 - Internal mammary vessels
6. Stanarohita 2 - Lower part of Pectoralis major muscle
7. Apalapa 2 - Lateral thoracic and subscapular vessels
8. Apastambha 2 - Two bronchi

Marma of Back - (14)
1. Katikataruna 2 - Sciatic notch
2. Kukundara 2 - Sacroiliac joints
3. Nitamba 2 - Iliac Tuberosity
4. Parsvasandhi 2 - Common celiac vessels/ Renal angles
5. Vrathai 2 - Subscapular and Transverse cervical arteries
6. Amsaphalaka 2 - Scapular spine
7. Amsa 2 - Coraco-humoral, gleno-humoral ligament trapezius muscle

Marma of Head and Neck (Supra clavicular region) - (37)
1. Nila/Manya 4 - Right and left common carotid artery or RF Subclavian Artery and internal Jugular veins, vagus between them
2. Matrika 8 - Blood vessels of the neck
3. Krikatika 2 - Atlanto-occipital articulation
4. Vidhura 2 - Posterior auricular ligament/vessels
5. Phana 2 - Kiesselbach’s plexus in little’s area/ olfactory region of the nose
6. Apanga 2 - Zygomatico-temporal vessels
7. Avarta 2 - Junction of the frontal. Molar and sphenoid bone
8. Utksepa 2 - Temporal muscle and fascia
9. Samkha 2 - Temples
10. Sthapani 1 - Nasal arch of the frontal vein
11. Simanta 5 - Cranial sutures
12. Sringataka 4 - Cavernous and inter-cavernous sinuses
13. Adhipati 1 - Torcular herophili
Section Two

MARMA THERAPY
5

Aim of Marma Therapy

In *Charaka Samhita* the aim of *Ayurveda* is explained as preservation of health of healthy individual and to treat the ailments of a diseased person. As we know that Maharshi Susruta has a different opinion and a little different aim of treatment in comparison to *Charaka Samhita*. He was concerned with the treatment of a diseased person; in another step he was concerned with the health of the person who was treated earlier by operation or other means. With the help of *marma* therapy we can fulfill the aims of *Charaka Samhita* as well as the motives of Maharsi Susruta. As a curative treatment it can be used widely in many diseases and as a supportive treatment it can be used along with any medical science, without hindrance, along with its drugs and procedures.

*Marma chikitsa* is very popular in manyplaces as a traditional skill. A number of bonesetters and *nadi vaidyas* practice by this speciality. But as a traditional skill it has no scientific explanation behind it and it is limited to some traumatic lesions of muscles and bones. The scientific presentation of *marma* therapy is the need of the hour. This science is still obscure. In the light of theoretical description available in the old texts and present research and knowledge, *marma chikitsa* has been further developed and practised.

*Marma* therapy contributes to increase or recharge physical, mental and spiritual energies. On the physical level it helps to revitalize or reenergize the body tissues; at cellular level, it improves the vital functions like digestion, respiration, blood circulation and excretion. On the psychological level it improves the mental faculty by directing it in the positive direction. It also offers a way to treat many psychosomatic ailments without any drugs. It harmonizes the functioning of nervous and endocrine systems to control psychological disorders. On the spiritual level, reasoning of mind, regulation and transformation of thoughts in positive direction helps to concentrate towards the ultimate goal of life. As a preventive measure it helps to cope with the situations arising from different diseases.

*Marma* therapy is also responsible for the perception of psychic centers. These methods are supposed to attain the ultimate transformation in inner consciousness. When one starts practising
self-marma therapy one experiences gaining of physical, mental and spiritual energy. 

*Marma chikitsa* can be used in the following ways—

a) To treat the diseases of nerves and brain.

b) In traumatic neurological or neuro surgical lesions, traumatic paraplegia, hemiplegia and monoplegia.

c) In orthopaedic lesions, especially prolapsed inter vertebral disc etc.

d) To reduce the pain of nerves, muscles, ligaments, bones and joints.

e) To produce anesthesia during any surgical interference.

f) To improve the function of body organs by achieving homeostasis.

g) To activate the mal-developed or deformed body parts or musculature etc.

**Neuro-muscular lesion of forearm**
Marma Therapy in Different Diseases

Vertebral Column Injuries and Spinal Cord Lesions

The spinal cord consists of a tubular continuation of the brain together with this in three membranes, the dura mater externally, the arachnoid, and internally, the pia mater. Sub-arachnoidal space is between the arachnoid and pia mater, filled with cerebro-spinal fluid. The material of the cord consists of white matter externally and grey matter internally. The spinal cord passes through the neural canal of the vertebral column. Injuries to vertebral bodies and inter-vertebral discs may affect the spinal cord. Due to any direct or indirect trauma to the cord it is inflamed and softened at the affected part, and may be haemorrhagic.

Injuries of bony and neural content of the vertebral spine often coexist. It may be in the form of simple injury and extend to deformity. Mostly spinal cord injuries follow subluxation with or without rotary motion of the nearby vertebra which compress the spinal cord between the dislocated bones. Often the prolapsed inter-vertebral disc may also damage the spinal cord by putting abundant pressure on it. In older age groups degenerative arthritis of the cervical spine may also affect the spinal cord. The spinal cord may be trapped between the bony spars interiorly and ligamentum flavum, posteriorly. The distribution of oedema, haemorrhage and infarction produces the neurological symptoms. Contusion or laceration of the spinal cord is the result of any bony injury. This may cause oedema, haemorrhage, cell hypoxia and further degeneration.

Compression of the spinal cord is most commonly due to vertebral caries and injuries, together with fractures. In vertebral caries the stress results from the accumulation of pus and caseous material between the bone and dura.

Neuralgic pain is the foremost symptom, due to compression of nerve roots, radiating the length of the affected nerves and accompanied by hyperesthesia and followed by anesthesia. When anterior roots are compressed, atrophy follows in the muscles supplied by them. It causes narrowing of the cord with myelitis at the site of compression. Paralysis of gradual onset, anesthesia, increased reflexes and spastic rigidity are other subsequent symptoms of...
anterior root compression. In caries and traumatic lesion, curvature of the spine may be deformed and tenderness is usually present over the vertebral column. In vertebral column injuries and spinal cord lesions *kshipra, talahridaya, kurca, kurcasira, gulpha, indravasti, janu, urvi, ani marma* of contra lateral and affected leg should be treated with rubbing, pressure, oil massage, paste application and fomentation. The *vasti-chikitsa* and *marma shalya* offer a very promising option for these patients.
Marma Science and Principles of Marma Therapy

Compression of vertebral body of L2 vertebra

**Traumatic peripheral nerve lesions**

The main causes of nerve injuries are open wounds made by any sharp objects, traction or pull and fracture-dislocations of bones and joints. In recent years frequent use of injection also may cause nerve injury.

The consequences of injury to a nerve depend on the site, severity and the nature of trauma. In first degree trauma there is temporary failure of nerve conduction without loss of axonal continuity. In second stage there is loss of axonal continuity as well as death of the axons distal to the injured site. But in this condition endoneural tubes are preserved. In complete damage, endoneural tubes are completely broken with total loss of the nerve fibers architecture.

The peripheral nerves contain sensory and motor nerve fibers or both. In axonal discontinuity the proximal end of the nerve first of all swells and undergoes degeneration depending on the severity of injury. After that neuroma made up of connective tissues develops. An interweave bunch of regenerating axons also takes place. In mild nerve injury degeneration occurs but regeneration of axons also takes place. In any nerve injury sensory, motor, and reflex changes depends on the involvement of the particular peripheral nerve and its level. It may be due to remote or recent nerve injury. Causalgia, severe burning pain along with the distribution of affected nerve,
trophic changes in affected part and vasomotor hyperactivity are distinguishing features. In accidental trauma there is injury to vertebral spinal cord and corresponding peripheral branches. Due to injury to spinal cord there is loss of sensation and loss of function of the body below the injury site. There is no control over defecation and micturition. Due to long standing stay on bed there are chances of bed sores and these wounds do not heal in due course.

Due to increased occurrence of accidents the incidence of spinal injury is becoming high. Thousands of patients are bound to live without any solution in the neurosurgical wards. In cases of traumatic peripheral nerve lesion kshipra, talahiridaya, kurcha, kurcha sira, gulpha, indravasti, janu, urvi, ani marma of contra lateral and affected leg should be treated with rubbing, pressure, oil massage, paste application and fomentation.

**Facial paralysis**

Due to sudden excessive blood loss in a pregnant woman, old person and debilitated person, loud speaking, chewing of hard food material, excessive weight lifting, sleeping on uneven surface, vitiated vata situated in the region of the head, nose, lips, chin, forehead and corners of eye affects the face and causes ardita (facial paralysis).

In this disease half the side of the face becomes uneven, the neck becomes one-sided, the head moves frequently and there is difficulty in speech, abnormal appearance of eye, and neck, chin and teeth get twisted on the same side. Premonitory symptoms are horripilate, trembling, dirty eyes, upward movement of gas, numbness in skin, prickling pain, stiffness of neck and jaws. The disease is known as ‘ardita’.

In facial paralysis dharami, matrika marma of neck, krikatika marma at the junction of head and neck, vidhura marma behind the ear, apanga, avarta, utkshepa, samikha, sthapani, simantas and adhipati should be treated with mild rubbing, pressure, oil massage, paste application and fomentation. Initially the marma of contra lateral part should be treated; afterwards the same process should be adopted in the affected side.

Ardita is not curable in emaciated persons, having fixed eyes and constantly muffled voice, trembling and for duration of more than three years.
Sciatica and other lesions of lower extremity

When the ligaments of heel and toes are badly affected with *vata*, this process hinders the movements of the leg. The ligament of the heel extends upwards and the ligament of the toes extends downwards, thus these two ligaments here are meant to be responsible for the diseases. The sciatic nerve gets injured if the person is in the lithotomy position with the thigh and legs extended outwards and rotated or if the knees are extended.

Pain down from the back to the waist, hips, thigh and legs is the important symptom of sciatica. Usually pain radiates from the waist to one or both the lower extremities. In sciatica *kshipra, talahridaya, kurca, kurcasira, gulpha, indravasti, janu, urvi, ani mama* of contra lateral and affected leg should be treated with rubbing, pressure, oil massage, paste application and fomentation.

Severely painful swelling in knees caused by *vata* and *rakta* and simulating jackal’s head is known as ‘*krostukasirsa.*’ Vayu combined with *pitta* and *rakta* causes burning sensation in the feet particularly while walking and this is known as ‘*padadaha*’.

When there is tingling sensation in feet and they become nearly numb it is known as ‘*padaharsa*’ which is caused by aggravation of *kapha* and *vata*. In these conditions *kshipra, kurca, kurcasira, gulpha, inda vasti* and *janu mama* points should be treated.

Torticollis/Cervical spondylosis

Sleeping on uneven surface, postural deformity, long standing upward or downward movement may lead to vitiate *kapha* and *vata* to produce *manyasthambha*.

In this disease there is difficulty in the neck movement along with pain, numbness and tingling sensation in upper extremity. In severe cases patient may feel vertigo and discomfort sometimes.

For its treatment *kshipra, talahridaya, kurca, kurcasira, manibandha, indravasti, kurpara, urvi, ani mama* along with *dharnani, matrika, krikatika* and *amsa, amsaphalaka* of back should be treated with rubbing, pressure, oil massage, paste application and fomentation.

Brachial neuralgia and wasting of shoulder joint

When the ligaments of the palm and fingers get affected with vitiated *vata*, and also when the ligament in the back of arms gets affected, this produces loss of function in the arms. This condition is known as *visvaci*. 

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Injury to the brachial plexus nerve, the most common trauma, usually results from the arm being extended more than 90 degrees when the patient is lying supine. It also produces the symptoms of brachial neuralgia. Vayu situated in the shoulder dries up its binding element and thus produces ‘amsasosa’. The same while contracting the ligaments causes ‘avabahuka’. Brachial plexus injury also takes place during labour by manipulating the foetus to bring it out from the mother’s womb.

In all these conditions marma therapy is very effective. Marma therapy should be started from kshipra, talahridaya, kurca, kurca sira, manibandha, indravasti, kurpara, ani and urvi respectively. This procedure should be continued till the complete recovery is achieved, every day three times a day for 2 minutes.

Cerebral Palsy

Cerebral palsy is a non progressive neuromuscular disorder of cerebral origin. 2-3% children are affected by cerebral palsy. Crores of people are suffering from cerebral palsy and are supposed to live like handicapped people. 50% of this group can walk without assistance but 30% are unable to walk without calipers or support; 20% children are unable to walk even with the support and they are confined to bed. There is no proper treatment or remedy for cerebral palsy so these patients and their family members are supposed to live life in misery. It is very difficult to provide medical care to such a big number of patients of cerebral palsy. There is no treatment available in modern medical science. Usually cerebral palsy takes place due to different causes of trauma to the brain. It may be prenatal, during labour and post natal hypoxia to the brain. Due to hypoxic condition a number of degenerative changes take place in the brain so the function of brain gets affected. In addition to these main causes some other causes of cerebral palsy are important, like infection, low level of glucose in blood, hyperbilirubimia and other metabolic lesions.

There is quite a variation in the clinical symptomatology. The symptoms are according to the severity and site of lesion. Motor disorders of brain are due to disordered development of brain, birth trauma, birth anoxia and metabolic disturbances. It is important to know that it is not a familial disease. The variation of symptoms in 50% self ambulated, and 30% impaired ambulated patients is as follows:-

1. 65% cases are spastic due to involvement of the motor cortex and pyramidal system.
2. Neural damage include abnormal reflexes.
3. Hyper excitability. (Hyper activity)
4. Firm grasp reflex.
5. Spasm of adductor muscles manifest as scissoring of the lower limbs (crossed leg).
6. In severe handicaps ophisthotonous condition is common.
7. Quadriplegia and diplegia-lower limb more severely involved.

In Pseudobulbar Palsy:- Difficulty of swallowing, drooling, inspite of hypotonia the tendon reflexes are brisk and Babinski response is positive.

In Extra pyramidal involvement:- Usually cerebral damage following bilirubin encephatopathy
- Asthetosis
- Choreiform movement
- Tremors and rigidity- Arms, legs, neck & trunk may be involved.

In Cerebellar Involvement: - In 50% cases, hypotonia, hyporeflexia, ataxia, intention tremors, nystagmus is unusual.

Mixed type: - Associated features are in eyes- Strabismus, paralysis of gaze, cataracts, coloboma, and retrolental fibroplasia, perceptual and refractory errors.

In ear: - partial and complete loss of hearing, brain damage due to rubella, may lead to receptive auditory defects.

Speech- Aphasia, dysarthria, dyslalia, dyskinetics, scissors are common and intelligence level is affected.

There is no treatment available in the modern medical science apart from:
2. Tranquillization for behaviour.
4. Physiotherapy, massage, exercise, hydro therapy.
5. Occupational therapy, speech therapy and rehabilitation.

In these circumstances marma therapy is a boon for patients of cerebral palsy. It is a miraculous way of treatment which gives instant and permanent results in this disease. Diagnosed cases of cerebral palsy are selected for the marma therapy. Marmas of upper and lower extremities, back and head are stimulated accordingly. Spasticity decreases in a couple of sessions of marma therapy. Some impaired ambulatory children can walk easily with a few sessions. Scissoring of leg is also decreased along with drooling and other associated symptoms. The instant regression of symptoms generates the ray of
hope in the eyes of patients and their family members.

*Marmas* of extremities— kshipra, tala hridaya, kucha, kurchasira, gulpha/manibandha, indravasti, janu/kurpara, anl, urvi, marma of back, amsa marma, amsaphalaka, vrihati, parsvasandhi, katikatarun.

*Marma* of head— Apanga, avarta, utkshepa, samkha, vidhura.

**Technique of marma therapy in Cerebral Palsy**

*Marma* therapy should be given in a lying down position. Initially therapy should be started from lower extremity, upper extremity back and head. *Kshipra marma* should be pressed gently. In *gulpha marma* both sides of ankle joint should be vibrated and pressed very carefully, because these points are painful so patient may not be cooperative. You have to take the patient into confidence. After few sessions, pain at the *marma* sites decreases considerably. The whole process of daily *marma* therapy takes only 3-5 minutes. Just after every session the patient feels decline in spasticity and other symptoms and feels better and more comfortable. Follow-up *marma* therapy is demonstrated to the parents or guardian of the patient. 3-5 sessions per day give remarkable results.

It is amazing that a few minutes of *marma* therapy for a few months gives freedom from life-long management of patients and assistance to them, without cure of the disease.

**Ankylosing Spondylitis**

Arthritis of the spine is commonly known as ankylosing spondylitis. Other joints of the body may be involved during the progression of the disease. In a simple way we can understand that ankylosis means fusion and spondylitis means inflammation of the spine or vertebral column. In this disease, the whole spine is involved through inflammation of the ligaments, joints as well as vertebral and other soft tissues. Usually this disease starts from the sacroiliac joints, where the sacrum meets the pelvis, causing mild to severe pain, inflammation and stiffness. In later stage due to inflammatory response and repair, fusion of vertebrae takes place in the form of bamboo spine. In this condition the spine becomes rigid and the flexibility and movement of the spine decreases considerably. The person cannot move or rotate the trunk and neck in any direction. In advanced cases forward stooping of the spine takes place.

Ankylosing spondylitis is one of the main varieties of spondylitis. This comprises 5-10% of total cases of rheumatic disease in the
The onset of ankylosing spondylitis is associated with the human leucocyte antigen B-27 gene (HLA-B27). It is not the only diagnostic criteria for the ankylosing spondylitis. Ankylosing spondylitis is considered a hereditary condition precipitated by a number of factors. The onset of the disease occurs at the age of 15-35 years. In the U.S.A. more than half a million people suffer from this disease. The actual data about India is not available but it is believed that it is multifold than the incidence in the U.S.A.

The clinical symptoms vary in range from individual to individual. Males are three times more victim than females. The inflammation and pain caused by ankylosing spondylitis may affect hip joints, shoulders, knees, ankles, ribs, costovertebral, costosternal joints and the joints of hands and feet. The inflammation may involve eyes, kidneys, heart, lungs and muscles and cause mild to severe pain. Mild joint pain, back ache and stiffness are usually early symptoms.

Diagnosis of the disease is based on clinical symptomatology, family history, past history, X-ray findings of spine & affected joints and test of HLA-B27 gene.

The exact cause of disease is unknown and the treatment is not satisfactory. So the patient has to live his life with the disease. Being progressive in nature symptoms become more pronounced, so one has to compromise with the disease and try to manage pain, stiffness, limitation of movements, postural deformity, spinal conditions, hip and shoulder conditions, neck pain and neck rigidity. Knee pain makes the person confined to bed. Eye, kidney, lung and heart lesions bring more difficulties off and on in generalized disease conditions.

In ankylosing spondylitis, like in other incurable diseases, marma therapy and panchakarma give amazing results. Regular marma therapy gives prompt relief in pain, stiffness, swelling and associated symptoms. Radiological finding disappears within 3-6 months of regular marma therapy. Many surgical arthritic deformities may disappear or get corrected with marma therapy and patients get assurance of becoming healthy and symptom-free.

Marma science has already benefited thousand of patients with amazing results in different incurable diseases. It is a non-surgical and non-medicinal intervention reaching the poorest strata and curing all kinds of neurological, bone and other ailments. A number of common diseases like hypertension, diabetes, painful knee diseases can be easily treated by marma therapy.
Concept of Pain in *Ayurveda* and its Management through Marma Therapy

Pain is one of the most common features of traumatic lesions and understanding of its nature and properties is important for the successful management of pain. In *Ayurvedic* medicinal therapy, this is the only lacuna, that is, the immediate management of pain. *Marma* science and therapy has an answer to this and hence, if we incorporate *Marma* science in the broad field of *Ayurvedic* therapy, we can overcome this lacuna. *Marma* science also draws its basic premises from the same body of texts as the other disciplines of *Ayurvedic* practice.

Pain is a psychical response of an imperative protective reflex; pain is the sensation one feels when one gets injured. Pain must be explained as an experience rather than as a sensory change in the real neurological sense. One cannot give any precise definition of pain because of the difficulty of explaining where the afferent pain impulses caused by the traumatic agent arise before they pass up into the central nervous system to be explained by the psychical and emotional state of an individual, based upon the previous and present experience about the trauma. Just after birth the newborn child gets experience of traumatic pain during the umbilical cord resection. It is the first experience of a baby which goes into the memory of the child. Any other pain experience in the coming life gives the comparative feeling to the child.

Pain is produced by stimuli exceeding the intensity threshold for sensory nerve endings. The nervous impulses are produced by the stimulation of peripheral receptors, which is inferred as pain within the higher cerebral centers. Such type of nervous activities may be produced by a number of physical phenomena, i.e. pressure, squeezing, tension, tearing, puncturing and by the change of temperature, cold and hot, or by the chemical effects such as the change of pH, i.e. concentration of histamine-like substances, bradykinin, serotonin and other polypeptide compounds.

Pain may be local, diffused, radiating and referred. Local pain is felt at the pathological/traumatic site and in superficial structures. On examination there is marked local tenderness on palpation and
percussion. Diffused pain is usually deep-seated and has more or less segmental distribution. Radicular/ radiating pain is intense in character and it is a radiation from the center to periphery. It is often associated with paraesthesia and tenderness along the nerve root, as in brachialgia and sciatica.

In *Susruta Samhita*, Maharshi Susruta has mentioned that the commonest feature of wound is pain. Wound and pain are both coexisting features of trauma. Pain is a feeling of uneasiness. In Ayurveda, vedana, dukha, pida, sula, ruk, rija, bheda, sadana, avasada, are words used for pain. According to *Susruta Samhita*, the main causative factor of pain is vata. The seat of pain is mana (psyche) and sharira (body).

In all cases of vatika predominance, the chances of pain are quite common along with other clinical presentation of vatika anomalies. In normal state the vata is responsible for the activation of a number of functions of different systems. According to the *Astanga-hridaya*, sutrasthana 12/49-50, derangement, displacement, dilatation, piercing pain, anesthesia, lethargy, pricking and incising pain, constricting pain, breaking pain, twisting pain, excitation of hair follicle and thirst due to severe pain, tremor, hardening, porosity, dryness, stimulation, spasm, distaste of mouth, black and reddish black discoloration are due to the vata.

According to *Susruta Samhita*, marmas causing pain are predominant in qualities of agni and vayu as they particularly cause pain; some on the other hand quote that pain is related to all five elements (panchamahabhutas).

**Types of pain** in wounds—

- **Vatika Vedana:** Todana (pricking pain), Bhedana (cutting/incising pain), Tadana (pain due to blunt injury), Chedana (cutting/excising pain), Ayamana (stretching pain), Manthana (gripping pain), Viksepana (pulling pain), Cumcumayana (tingling sensation), Nirdahana (burning pain), Avabhanjana (breaking pain), Sphotana (bursting pain), Vidarana (perforating pain), Utpatana (tearing pain), Kampana (tremoring pain), Vislesana (dislocating pain), Vikirana (radiating pain), Purana (distending pain), Stambhana (stiffness/ankylosing pain), Swapana/ swapa (anaesthesia), Akuncana (spasmodic pain), Ankusika (anchoring/hanging pain), Atimatra vedana (sudden excessive pain), Vividha shoola (different pain)

- **Paittika Vedana:** Osa (burning pain), Chosa (scalding pain), Paridaha (burning sensation all around), Dhumayana (sensation of hot smoke), Gatrangaravakimamiva pacyate (sensation of touch by
burning coal), *Usmabhivriddhi* (increased temperature), *Kshate ksharavasiktavaccha vedana* (caustic application over wound like pain)

**Kaphaja Vedana:**— *Alpavedanama* (mild pain), *Suptatvama* (numbness), *Avedanam/aruja* (anaesthesia), *Parsvasubheda* (pain in flanks)

**Tridosaja/ sannipataja Vedana:** — *Vividha vedana* (different kinds of pain), *sarva vedana* (all kinds of pain).

In different Ayurvedic texts, the abdominal colic (*sula*) is described to be of eight types. They are due to the separate three *doshas*, due to combination of all three *doshas*; due to *ama dosha* and the rest of them (three) are due to combination of two *doshas* (*vayu and kapha, kapha and pitta, vayu and pitta*). However in all these colics there is predominance of *vayu*. Apart from the *dosha* vitiating diet, suppression of the natural urges of defecation, ejaculation, urination and flatus is responsible for the colicky (spasmodic) pain. The sites of pain are precordial region, flanks, back, sacral and suprapubic regions. The *vatika sula* is characterized by being spasmodic in nature having the periods of exacerbations and remissions repeatedly with the retention of urine, flatus and faeces. It can be identified as pricking or tearing type of pain. The *paittika sula* is very severe and sudden in onset. The colicky pain is associated with thirst, fainting, burning sensation and pain in the umbilical region. Excessive perspiration, vertigo are also accompanied by the *paittika sula*. The *kaphaja sula* is low intensity colicky pain in the abdomen. It is associated with nausea, cough, malaise, anorexia, excessive salivation, and heaviness of abdomen. The colicky pain is aggravated after meals and in the early morning. In *sannipataja sula* all three *doshas* get vitiated. The clinical presentation may be varied accordingly. All the symptoms may be in aggravated state. *Amaja sula* may be compared with *kaphaja sula*. The pain is associated with abdominal distention, increased intestinal movements, nausea, vomiting, constipation and excessive salivation.

The site of *kapha vatika sula* is urinary bladder (suprapubic region), precordium, flanks and back. The *kapha paittika sula* occurs in epigastrium, cardiac and mid umbilical regions. The *vata paittika sula* is very severe in nature with burning sensation and fever.

The colicky pain (*parinama sula*) caused by *pitta* and *kapha* mostly occurs during the period of digestion, and envelops the vitiated *vayu*. In comparison to *kaphaja sula* it takes place in empty...
stomach when food material passes towards the intestine for the digestion.

In *vatika parinama sula* the spasmodic pain gets relieved usually on taking warm and fatty meals. The pain is associated with flatulence, tympanitis, constipation, oliguria and restlessness. In *païttika parinama sula*, the colic is accompanied with thirst, burning sensation, uneasiness and excessive sweating. The pain is aggravated by taking pungent, sour and salty food and relieved by the ingestion of cold substances. In *kaphaja parinama sula* the colic pain is of low intensity associated with nausea, vomiting and mental confusion. The pain is static/constant in nature. The pain gets relieved on taking pungent, bitter and hot substances.

Mixed clinical features are presented by the vitiation of two *doshas*.

In *sannipatika parinama sula* all three *doshas* are vitiated. The pain is associated with excessive weakness, cachexia and indigestion. It is considered as incurable.

*Annadrava sula* (colic pain) persists irrespective of food intake, during and after the digestion of food. The colic does not subside by any means of dietary alteration. Pain does not subside until and unless the bilious substance comes out after the vomiting, spontaneous or effortful. Pain only subsides then.

The management of pain comprises of a multifold approach. It can be categorized into local management and systemic management. The pain caused by traumatic lesions can be managed by local fomentation, irrigation, application of local medicament and bandaging.

In *Ayurveda* the term *vedana* is more or less used for the feeling. It may be the feeling of well being or feeling of illness (*sukhatamaka* and *dukhatamaka*). The drugs used for the conversion of the feeling of illness into the feeling of well-being are known as *vedanasthapana*. The governance of all kinds of body sensations is the subject of the *vata*. But during the vitiation of *vata* all these functions get disturbed and the excessive activity of vitiated *vata* may cause pain sensation. According to *Ayurveda*, all painkillers (*vedanasthapana*) are *vatashamaka*. The *vatashamaka* drugs are mostly *ushna virya*.

Pain has no outside or external existence. It is a most personal experience, cannot be shared by any other person. Pain is an individual experience of ill being. Inadequate management of pain causes impaired function, depression and insomnia. One kind of pain
Marma Science and Principles of Marma Therapy

may not be managed by any single medicine or manual practice, because they may have different causes. In Ayurveda there is no particular uniform medicine for any kind of pain. Management of pain depends upon the causative factor or doshika predominance responsible for the pain.

In conventional (allopathic) pain treatment a number of analgesics, anti inflammatory, antipyretic drugs, chemotrypsin and serratiopeptidase like chemicals and opioids are used, but there is no universal drug for the all kinds of pain till date. Every individual responds to pain in a different way. In the same way every analgesic chemical acts pharmacologically in a different way. Only one analgesic preparation cannot solve the problem of pain. So the management of pain is not so simple and satisfactory with the aforesaid drugs.

Instant pain relief is the motive of marma therapy. Stimulation of marma can produce analgesia by secreting a number of prostaglandin inhibitors, endorphins, enterferon and other opoid-like substances which are hundred times more potent than opium. Instant pain relief by marma therapy is possible within no time.

Following marma points are responsible for the relief of pain in different organs.

4. Cervical (neck) pain -  Kshipra, Kurpara, Ani marma
5. Leg and knee pain -  Kshipra, Gulpha
6. Sciatic pain -  Kshipra, Gulpha

Pain management aims at minimizing the distress, feeling of unrest and improving the quality of life. A cardinal point in the management of pain is that it should be holistic and patient-centered in its application. This can be fulfilled in the Ayurvedic approach only in terms of marma chikitsa.
8

Effect of Marma Therapy on Psychological Conditions

Stress is an unavoidable factor in the human being caused by several factors and leads to several states of disease. Stress is an especially complex phenomenon in present modern technological society. Incidence of stress is increasing day by day in the society throughout the world. It is more pronounced in the so-called advanced society then the orthodox society. In the present times, a state of great nervous and emotional tension has developed among most of the people in society. They become somewhat unaccustomed to living and working peacefully together. This condition is the precursor of personal and social diseases.

Every one is living in the age of tension because he is confronted with situations producing stress. As a result of this the incidence of hypertension and heart diseases is increasing regularly and the younger people are becoming more victims of these diseases. In the present times, most of the population is constantly subjected not only to physical exertion but also psychological disturbances due to changing life style, stressful jobs, competitive attitude, changing food habits and pollution. The existence of mental stress is a part of the so-called modern life style. This is accepted worldwide.

Frequent stressful situations affect the body and mind. It is very important to cope with this situation. Over-activity and restlessness produce psychological or psychosomatic disorders. Stress is a state of physical or mental tension or strain resulting from a number of factors, which tend to change an existent equilibrium. Stress has been linked with coronary heart disease, psychosomatic disorders and various other mental and physical problems. Ischaemic heart disease, hypertension, anxiety neurosis, headache, migraine, insomnia, thyrotoxicosis, irritable bowel syndrome, peptic ulcers & diabetes are the most common stress disorders. Psychosomatic stress plays an important role in the manifestation of these diseases. Excessive stimuli received through different sense organs lead to increased activity of the psychic center of the brain. Mental strain leads to excessive liberation of acetylcholine, catacholamine like neurohumors from the brain, which causes many systemic diseases. The nervous
system is an important component for the body functions. As we know the entire nervous system is governed by the brain and spinal cord.

Hypertension is a common disorder of stress and strain in human life. Stress resulting in hypertension is maximum in the middle age of the life span. Changing lifestyle, worries and responsibilities at this age are supposed to create this condition of stress. This occurs as a result of increased sympathetic-adrenomedullary activity of limbic and hypothalamic region of the brain. Through this process the catecholamine level becomes high which then produces general vasoconstriction and hypertension. In many factors of hypertension, the hypothalamic factor plays an important role. These activities also lead to the various functional disorders of the heart. Cardiac neurosis, paroxysmal tachycardia and neurocirculatory asthenia are the commonest ailments of the heart due to stress.

One cannot prevent stress but one can prevent or minimize the effect of stress on the body and mind. It is very important how one is responding to the situation of stress. Usually the treatment of stress consists of counseling or psychotherapy, or a combination of both.

Meditation, pranayama, yogic practices and especially marma chikitsa are safe, medicine-less options for conscious relaxation of body and mind. The practice of relaxation results in reduction of skeletal muscle spasm and drastic reduction of metabolic activity. It gives a chance to make the body energy flow in a proper way, uninterruptedly, enhancing the physical health.

Marma therapy must be practiced for a few minutes as the commencement of all physical exercises like yogic exercises and western style exercises. With this every muscle of the body is persuaded to relax. In a nutshell we can say that marma therapy is the shortcut key to all aforesaid physical exercises, yoga and pranayama.

Factors responsible for excitation and suppression of brain are increasing by changing life style and environment. Anger, grief, sorrow and other feelings may affect the heart and brain. Such psychological trauma may affect mental and physical health. In psychological and physical ailments, because all diseases have inter-relationship between mind and body, all psychosomatic disorders can be treated by the physical marma therapy as well as meditational marma therapy. In meditational marma therapy, during pressure on the marma point, it is better to concentrate the mind on those marma points which are responsible for the disease. During the
concentration one has to think of God or universal flow of energy in these points or repeat *Mrityunjay mantra*. By doing this we can increase the effect of *marma* therapy.

*Marma* therapy is the best technique to attain the effects of *yoga* and *pranayama*. It is based on the wisdom of ancient Vedic science and has been formulated in terms of most suitable technique for the present times.
Different Procedures / Methods in Marma therapy

Examination of the body surface for the assessment for locating the proper marma point is necessary. Actually it is impossible to give the exact location because of individual differences. Before marma therapy one has to determine the actual location of specific marma points. The exact location of marma varies according to an individual according to the measurement of the body and body parts. The site is described in relation to the bony prominences, joints and other body structures. The distance is described in finger measurement of the individual. The extent of each type of marma is also discussed. The location of marma points is described in the text Susruta Samhita extensively. The size of the particular marma is also mentioned.

Due to different anomalies or ailments the related marmas behave in different ways: they turn into stiff, tender, cool, hot, pulsatile, swollen, rough, uneven or depressed areas. This shows that these are affected marma points.

After identification of marma, inspection, palpation, pinching and pressure confirm examination of these points. The marma which is harder, more sensitive on palpation can be identified easily. Anatomical consideration of marma with diagram and tables is available in the book.

The different methods of marma therapy include
1. Deep breathing and holding of air in the chest, upper respiratory tract and mouth. This stimulates the 37 marmas of the neck and head.
2. Posturing of body. Examples are to be drawn from normal human postures which are adopted by human beings in day to day life like inter-digital pose, cross-hand and cross-legged pose as well as Yogasanas in which stimulation of marma points is inherent.
3. Pressure over the marma points, vibrating, pinching and lifting the skin layers over the marma points and application of medicaments and oil massage over the marma points.
Assessment of marma points on back

Examination of marma of back

Marma therapy on janu marma
Marma therapy on *indravasti marma*

Marma therapy on *gulpha marma*

Marma therapy on *kshipra marma*
Marma therapy on parsvasandhi marma

Lesion present over the site of parsvasandhika marma

Special method of marma therapy on back
Marma therapy on ani marma
Marma Shaiya Nirman

In different traumatic or atraumatic lesions of vertebral column, inter vertebral disc prolapsed or lesions of spinal cord, the marma-shaiya method, making and using of a plaster bed for therapy, gives tremendous and amazing results. First of all the assessment of lesion should be done according to the findings of X-ray and M.R.I. of the spine. Identification and marking of marmas of back and lower extremity should be done individually. Accordingly, the marma shaiya is made.

For this purpose the patient is asked to lie on a table in half cobra pose. The pillows support the chin and upper part of the chest during this posture. The whole body should be in a straight line. The patient should be asked to relax the body and remain in the same position up to the completion of the plaster bed. After that, a cotton pad covered with gauze should be spread from head to the ankle joints. Water soaked—one central, two cross, two sides, one head, one shoulder, one waist, one hip and one lower—plaster casts are placed over the spread cotton pad by moulding and shaping regularly and quickly and repeatedly by the hands. During this process the points over the marmas are pressed with thumbs and fingertips quickly up to the drying of plaster cast. The outer surface of the plaster bed is properly shaped with putting more plaster bandages on it. Within half an hour when the plaster bed gets moulded and dry the whole moulded cast is lifted by hand and taken away and kept on another trolley or table.

After complete drying of this plaster shell its margins and inner marma points are repaired. The Marma-shaiya is placed on a flat surface in reverse position. The patient is advised to lie down on this plaster bed. The patient uses this bed regularly. Spinal traction and pressure over the marmas by prominent points of the plaster bed provides tremendous results in the patients of vertebral column and spinal cord diseases. The patient is advised to use this bed regularly at least for 1/2 hour to 3 hours daily. For complete cure he has to use this bed for months together or up to the stage of complete cure.

The results of marma-chikitsa and marma-shaiya are very encouraging. It is the need of the day that this work should be
propagated in a big way to all the higher centers of neurological and neurosurgical diseases to give better management to those patients who do not receive any hope from any corner of medical science. A number of patients of P.I.V.D and traumatic paraplegia are doing very well with the marma chikitsa. Results of marma chikitsa have opened new rays of hope for the patients of spinal cord injuries.

Covering with layer of cotton

Spread of gauze piece over first layer
Placement of plaster cast over second layer

Initial pressure over the marma points

Formation of marma points of back
Formation of marma points of thigh

Formation of marma points of lower back

Filling of gaps with Plaster of Paris paste
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Shaping of outer layer of marma bed

Final Shaping of marma bed

Marma impressions on marma shalya (Internal aspect)
In cases of fracture-dislocation, symptoms arise abruptly and may very much be similar to acute myelitis. Any neurological deficit may affect musculoskeletal portion, connected to the particular nerve. Musculoskeletal disorders account for the condition of long-term pain, deformity and physical disability. In complete spinal cord injuries there is absence of voluntary nervous control and function below the injury site. There is complete loss of all reflexes below the site of injury including
Bulbocavernosus, cremesteric, anal contraction to personal stimulation and deep tendon reflexes. These are very significant to assess the improvement during the *Marma Chikitsa*.

To improve the quality of life of the patients of musculoskeletal ailments, the *Ayurvedic* measures/ therapies can play an important role. To advance understanding and treatment of musculoskeletal diseases through prevention, education and research, *marma therapy*, *panchakarma* and yoga can offer an effective way of healing and rehabilitation.

*Marma chikitsa* is started after early recognition of a spinal cord or vertebral column injury. All *marmas* are stimulated regularly twice a day by different means along with the *marma shaiya*. The embossed *marma* points on the inner surface of *marma shaiya* stimulate the *marma points* of the back.

Before *marma*-therapy and *marma shaiya nirman*, for therapy for vertebral column/spinal lesions, the following procedures should be done as *poorva-karma* (pre-operative measures):

1. Patient has to take deep breath at least 5-10 times before the start of *marma* therapy, to improve the flow of *prana*. By deep breathing there is complete relaxation of musculature and it is easy to conduct the *marma* therapy.
2. Application of *Mahanarayan* taila over the *marmas* followed by *nadi sweda* with *Dashmula-kwatha*. In case of *marma-shaiya nirmana*, *sarvanga abhyanga* and *sarvanga-sweda* is mandatory at least for 3 days prior.
3. Vasti of *Dashmula-kwatha* 200 ml, *Mahanarayana* taila 30 ml should be given at least for 3 days prior.
4. *Shatasakara churna* (3-5 grams) should be given at bedtime one day prior to *marma shaiya nirman*. 
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Technique of Self-Marma Therapy

Preparation for self-marma therapy for prophylaxis or to re-energizing the vitality:-

Marma therapy is an uncomplicated and easy-to-learn technique of regaining the vital energy.

Posture: - For successful practice of self-marma therapy, posture is important. The practitioner must remain steady, quiet and mentally alert during this practice. A sitting posture is most convenient for the practitioners. Usually one should assume a posture of cross-legged position, keeping the spine erect. Keep the hands on the knees in upward position or one can adopt the jnana mudra.

The most common postures for the practice of self-marma therapy are-

1. Simple cross-legged posture \((Sukhasana)\)
2. Lotus posture \((Padmasana)\)
3. Half lotus posture \((Ardha padmasana)\)
4. Diamond posture \((Vajrasana)\)
5. Sitting posture on chair
6. Standing posture

In exceptional circumstance, lying down position (recumbent posture) may also be adopted.

However the lotus posture is the best pose. But the practitioner can adopt any one of these postures during the self-marma therapy practice. If one cannot adopt some specific posture he can do practices in any posture any time and anywhere. During the practice one should try to keep the vertebral column erect and achieve the relaxation of the body musculature. In sitting and standing postures keep the neck and spine in straight line without stiffness or tilting towards any direction. In standing posture, the feet should be parallel to each other. The arms should hang down loosely from the shoulder joints near to the body with open palms facing inwards with straightened fingers.

Pre therapy exercises: - It comprises of the following steps: -

1. Total relaxation of body.
2. Deep breathing exercise.
3. Perception of body as whole.
4. Perception of psychic centers.
5. Perception of marma points.
6. Gentle massage with thumb and fingers over the marma points.

Then comes the actual therapy consisting of application of pressure with thumb or fingers over the marma points.

- After adopting the proper posture keep the eyes closed gently and exhale forcefully. Then inhale deeply for 5-10 times in rhythmic pattern.
- Try to relax the whole body musculature. Relax the body and mind to remove physical and mental tension.
- Concentrate your mind on marma points respectively. Initially concentrate your mind on guda (anal region), nabhi (umbilicus), hridaya (heart), kantha (junction of thorax and neck), bhrumadhya (middle of the eyes) and top of the head.
- Start pressing the marma in the lower and upper extremities from centre to periphery.
- For a male start from the right side, in the case of a female start from the left side of the body.

Self-marma therapy on the upper extremity: - In the upper extremity, place the hand on the opposite shoulder respectively, near the neck. At the position where the tip of middle finger rests on the shoulder, there is amsa marma. Press this vital point with the middle finger for 5-10 times. Below the shoulder two marmas, ani and urvi are also pressed in the same manner with the fingers of the other hand. Another important marma point is at the elbow joint; try to press the lateral and medial aspect gently. Usually these points are very painful and initially one can feel severe pain at this site. But the pain decreases after two or three days spontaneously.

Indravasti marma is situated in the middle of the forearm. Manibandha marma (wrist joint) is an important vital point. It is also pressed with the grip of index finger and thumb of another hand. For kshipra marma stretch out the thumb at 90 degree angle and find out the mid point at the base of the thumb. Kshipra marma is situated at the junction of thumb and index finger. Both the marma can be pressed with the help of index finger and thumb of other hand. For talahridaya marma, in the open palm, flex the middle finger and try to touch the area above the thenear eminence; the depressed area in the line of the middle finger above thenear eminence is talahridaya marma. This marma also can be pressed with the help of index finger and thumb of other hand.
Practice of relaxation and deep breathing

Vrihati marma

Blowing of oral cavity

Marma Science and Principles of Marma Therapy
Anuloma Viloma Pranayama

Parsvasandhi marma
Self-marma therapy on the lower extremity: Sitting in the lotus pose one can press the marmas of the lower extremity. In this posture the marmas of the foot i.e. kurca, kurcasira, talahridaya and kshipra can be treated properly. The area between the big toe and
the second toe at the base of the big toe is assessed as *kshipra marma*. Adopt the thunder bolt pose or lying thunder bolt pose for the stimulation of *marmas* of the lower extremity.

**Self-marma therapy on the thorax and abdomen:** Sit in *sukhasana* or lotus pose. Touch the umbilicus and the cardiac area of the chest with the tip of the fingers collectively. Apply sandal wood paste or oil over these vital points regularly. Stimulation of the anus can be achieved by alternate constriction and relaxation exercise of the anus (*ashwini mudra)*.

**Self-marma therapy on the back:** Any posture in which hyper flexion and hyper extension is attained can stimulate the *marma* of the back. For stimulating the *amsa marma* sit in *sukhasana* or on a chair, and keeping the upper arm parallel to the thorax place the hand on the opposite shoulder easily, near the lateral side of neck. The position of the tip of the middle finger indicates the location of the *amsa marma*.

Sub scapular vessels (*vrihati marma*) can be stimulated by keeping the arms across the back of the opposite side just behind the nipple. Renal angles can be stimulated by keeping the hands on the iliac crest. During this pose the thumb is placed on *parsva sandhi marma*.

**Self-marma therapy on the head and neck:** For stimulation of vital points of the head and neck different *pranayama* and blowing of oral cavity is important. For the *vidhura marma* put the hand over the head towards the ear of the opposite side, where the tip of the middle finger reaches easily. This is the *vidhura marma* on either side.

Different *marmas* of the face and head can be stimulated by giving pressure with the help of the finger tip over the particular *marma*.

**Time taken for self-marma therapy:** This *self-marma* therapy is the shortest way of keeping the entire human system healthy and fit. At any time, at any place and in any pose one can stimulate the *marmas* of upper and lower extremities as well as the *marmas* of other parts of the body. It takes maximum five to ten minutes to complete the *self-marma* therapy.

*Marma* Science and Therapy can be presented as a super healing science or spiritual healing technique. Usually *self-marma* therapy should be done two times a day, in the morning and evening, (5-6 A.M and 5-6 PM). In spite of this instruction it can be practised any time, anywhere, in any condition or posture, but if it is performed in relaxed state, the results are more promising and fruitful. As we
know, according to the old Indian or Vedic rituals the *trikal sandhya* is indicated. One has to perform worship of the Almighty, three times (morning, noon and evening) a day. During *sandhya*, *marmachchhadana* (protection of vital points) and *pranayama* is mandatory. According to Muslim religion five times *Namaz* (prayer) is mandatory. So *marma* therapy can be done three to five times a day according to the severity of disease and need.

**Conventional religious practices in daily life related with marma science:**

A number of traditional religious rituals and practices are common in the life of an Indian. Many day-to-day practices affect the marmas.

1. Special type of footwear (*khadau*) gives pressure on *kshipra marma* situated between the big toe and second toe of the foot. It gives a positive effect on the mental status of a person. It directly affects the excitatory activity of the mind. It also cools the mind, prevents the indulgence in sexual acts and helps in celibacy. Persons involved in spiritual practices use such type of footwear.

2. Application of different kinds of substances such as sandal wood paste on the forehead, middle of the eyebrows, neck and other vital points situated all over the body.

3. Application of *sindur* on the parting of the hair down the middle of the head.

4. Keeping the hair tuft over the top of the head.

5. Application of *tilaka* on the forehead between the eye brows.

6. Regular consideration and palpation or touch of *marmas* with the chanting of *mantras* during the religious activities.

7. Application of pious threads around the right ear during the evacuation of urine and stool.

8. In Muslim community adaptation of specific posture during prayer, five times a day.

9. Clapping during *satsanga* and offering prayer.

Regular self-*marma* practice offers long life by keeping away the effects of developmental changes, like old age, decay, disease and death. With self-*marma* practice, vital energy reaches every part of the body uninterruptedly. Regular practice of self-*marma* therapy makes a great contribution in the effort to attain supreme consciousness.
Precautions in Marma Therapy including in Pregnancy

*Marma* therapy is gaining popularity as an effective and rapid-acting way of treatment. For effective *marma* therapy, diagnosis of disease and proper technique application is mandatory. It gives prompt results in different kinds of muscular, ligament, joint and nerve pains, tingling sensation, inflammation and heaviness. *Marma* therapy gives response in many other diseases in due course of time. *Marma* therapy is more effective than the conventional techniques like acupressure and others.

However, being a rapid-acting technique, it should be performed very carefully. If not, there may be some complications and results may be variable. In other similar techniques like acupressure sometimes there is delayed response but it does not confer any adverse symptoms. Contrary *marma* points are very powerful, so in self-*marma* therapy and *marma* therapy for diseases, to get the best results some precautions are always advisable.

Where proper precautions and procedures are followed accidents and complications in *marma* therapy are neither serious nor frequent. In a daily routine of self-*marma* practice, accidents are uncommon but in *marma* therapy administered by another person, accidents are more likely to occur because of lack of experience, overlooking the type of *marma*, excessive pressure exertion over the *marma* point. In all these conditions where there is any complication like vertigo, vomiting, desensitization of body part, severe pain, unconsciousness, immediate medical help is required.

It is advisable that those doctors who are engaged in regular practice of advanced *marma* therapy should be capable of managing these emergencies. To avoid accidents one should keep the following things in mind.

1. One should learn *marma* therapy properly with the practical training under the guidance of well-known experts of *marma* science.

2. One should keep the anatomical structure of particular *marma* in mind and exert pressure accordingly. For example *sira marma* should not be treated as *asthi marma*. Maximum
pressure should be applied or exerted on sandhi, asthi, mansa, snayu marmas but sira marmas should not be pressed forcibly. Gentle massage in upward, downward and from center to periphery directions should be done at the site of sira marmas. Any extra pressure over the sira marma may give rise to complications. Especially the marma of the neck and head should be treated carefully and gently. Tappings, rubbing, knocking, gentle touch, alternate gentle pressure and release, application of medicated oil, paste are the methods of treating these marmas.

3. The patient should be in sitting, upright or lying down position on a hard bed. Especially in severe condition marma therapy should be given in lying down position. In some cases of severe cervical lesions, pressure exerted in sitting posture over the marmas of upper extremity may lead to severe vertigo, nausea, vomiting and unconsciousness. This is more common in female patients. During marma therapy one should keep watching the facial expression of the patient. Exertion of pressure on marmas should be avoided immediately when the patient feels agonizing pain and discomfort. Immediate medical help or following measures are needed for recovery.

1. Immediately place the patient in recumbent position on the bed or floor.
2. Try to lift the legs and keep the head end low.
3. Try to make proper ventilation.
4. Initiate the talahridaya marma and rubbing of palm and sole.
5. Massage the sides of neck in upward direction gently.

By following the above precautions, one may successfully take advantage of this powerful science of marma and marma therapy.

Pregnancy and Marma Therapy

In Susruta Samhita a number of harmful and dangerous factors are mentioned for the mother and foetus during pregnancy. In Dauhridaya vastha it is said that what is not favourable for the mother, the conditions that are not favourable for the mother are also not favourable for the foetus.

Keeping this concept in mind, in pregnancy, marma therapy should not be done as usual. It may lead to abortion or any congenital foetal lesions. Any trauma to the vital parts of mother can affect the vital energy of the mother as well as of the foetus. Any diminution in the vitality of the foetus may be dangerous, because the pregnancy period is very important for the mother and foetus both. Any traumatic
factor or vitiated dosha which affects the particular organ or body part of the mother, also affects the same organ or body part of the foetus.

*Dosabhigatairgarbhirnya yo yo bhagah prapidyate, sa sa bhagah shishostasya garbhasya prapidyate.*

Specific marma therapy with milder techniques (massage, tapping, less pressure, application of oil, paste etc. over vital points) can be advocated in the pregnant mother for her ailments and for the prevention of congenital anomalies of the baby. After examination of the foetus, atrial septal defect, ventricular septal defect and other cardiovascular lesions can be protected by treating four talaahiridaya, urvi and ani marma of the mother. This kind of practice can be continued till labour. Vatanashaka taila described by Susruta in vata vyadhi, almond oil and other oils used for vata roga should be applied on these vital points. It is an important instruction that the whole procedure should be done by the mother herself only; if it is done by some other person the chances of complications are always there. In regular practice for the well being of mother and foetus the following marma points can be treated by mother herself. Vidhura, apanga, sthapani, nabhi and marmas of upper and lower extremities should be treated with application of oil over these points. Following these instruction complications of labour can be avoided.

According to Susruta vitiation of vata dosa during pregnancy and non-fulfilment of the desires of the mother, may lead to a number of congenital foetal anomalies.

By following these precautions, we can properly achieve the objectives of Marma Therapy.

As said earlier, in the Charaka Samhita the aim of Ayurveda is explained as Swasthasya Swasthyaraksanama. Aturayas vicar prasamanamche: preservation of health of a healthy person and to treat the ailments of a diseased person. While Maharsi Susruta, as we know, has a slightly different aim and opinion of treatment in comparison to Charaka Samhita: Vyadhiupasristanam vyadhiparimoksha, Swasthasya raksanam cha: remove or treat the disease or ailment of a diseased person, and in another step we must care for the health of the person who was treated earlier by operation or other means.

With the help of marma therapy we can fulfill the aims of Charak Samhita as well as the motives of Susruta Samhita. As a curative treatment it can be used widely in many diseases like neuromuscular and orthopaedic diseases, diabetes, post poliomyelitis, quadriplegia, haemiplegia, third nerve palsy, ptosis cerebral palsy, severe osteoarthritis and painful knee diseases.

*Susruta Sharirasthana 3/17*
Section Three

MARMA SCIENCE, YOGA AND HEALTH
Health Promotion by Marma Therapy and Yogic Practices

Man is the best creature of God. The human body is made up of the five basic elements and soul. In spite of this quality the human body is the subject of all activities (Dharma artha kama and moksha). In Charaka Samhita this sada dhatu purusa is known as cikitsya purusa.

The human body is constituted by different systems: all these systems work together regularly without any hindrance. The human body is made up of seven basic dhatus i.e. rasa, rakta, mansa, meda, asthi, majja and sukra. A number of changes occur in the human body during the whole life span, the homeostasis of doshas is known as health; imbalance in the doshic state may lead to the disease: shariram vyadhi mandira means the body is the seat of diseases.

The aim of Ayurveda is to preserve the health of a healthy individual and to cure the diseases of a diseased person. There is a major role of marma therapy and yoga along with Ayurveda to fulfill the above-mentioned goal. The whole world is requiring marma therapy and yoga as a weapon to combat the diseases of modern life. Marma therapy and yoga is practiced by many people for achieving the healthy state of life. A number of incurable diseases are treated with marma therapy and yogic practices.

In the present era we suffer from a number of ailments. The main cause of such sufferings is stress generated by competitiveness, changing lifestyle and behavior. As a result the human being suffers from physical and mental illness. Adhyatmic, adhibhautik, and adhidaivik are three types of sufferings; these sufferings can be treated with mantras, marma therapy and yoga and Ayurveda collectively.

Under the present circumstances many people have come to realize the importance of marma therapy and yoga as practical methods of improving the states of bodily health and the quality of life. Marma therapy and yoga is used for achieving the equilibrium, harmony, and balance in day-to-day life. Various means of yoga may be grouped under asanas, pranayamas, kriyas, bandhas, mudras and dhyana.
Directly and indirectly all yogic practices affect the *marmas*. In the rest of this chapter, and the next we are elaborating with examples.

According to *Charaka Samhita* persons living near to nature remained away from diseases. Changing lifestyle and food habits are responsible for the manifestation of different physical and mental ailments. For achieving positive health it is necessary to lead life according to the natural laws. Early rising and proper sleep is necessary for good health. Consumption of natural food and plenty of water makes a difference. The body is a replica of the universe, changes in the universe affects the body. In this reference it is important to know that the change in the time (age, diurnal variation and season), place may affect the human body. Simultaneously the body activities, mental work up, feelings and speech affect the body itself.

*Marma* therapy and *yoga* are important to cure the disease and enhance the health status of the body. Nowadays *asanas* are much popularized in the society for health promotion. It improves the health and tones up the body musculature. These practices affect the body physiology. In the higher stages of yoga the practice of *asana, mudra, pranayama, bandha* are supportive to higher spiritual activities. *Marma therapy and yogic postures, as well as marma stimulation inherent in them*, have great impact on nervous system, musculo skeletal system, endocrine glands, respiratory system and organs of abdomen, heart and circulatory system. These marma practices and yogic exercises are developed by ancient *rishis* by observing Nature.

**Effect of self- marma therapy and yogic practices on digestive system:** -

Digestive power of the body improves by regular self-*marma* therapy and yogic practices. The essential substances are supplied to the body regularly by absorbing these substances through absorption of the food material by the intestine. Metabolism of food takes place in the liver. Excessive available nutrients are deposited in different parts of the body. During necessity the body itself utilizes these nutrients.

The following effects are seen on the digestive system by *marma* therapy and *yogic* practices:

1. It maintains the digestive power healthier by stimulating all organs of Gastro Intestine Tract.
2. It improves the digestive function of the body.
3. Increases the appetite by proper digestion of food.
4. Improves the function of intestine, so the intestine takes out
the harmful substances properly.
5. Improves the peristaltic movement of Gastro Intestine Tract and relieves constipation, loss of appetite and hyperacidity.
6. By proper digestion of food the body gets proper nutrients and it also improves the working capacity of the body.

Important organs of the digestive system—
1. Tongue
2. Salivary glands
3. Oesophagus
4. Stomach
5. Duodenum
6. Small Intestine
7. Appendix
8. Large Intestine
9. Rectum
10. Liver
11. Pancreas

Main Diseases of the Digestive System: -
1. Hyperacidity
2. Gastric ulcer
3. Gastritis
4. Stomach Cancer
5. Duodenal ulcer
6. Enteritis
7. Colitis
8. Appendicitis
9. Ulcerative colitis
10. Jaundice
11. Pancreatitis
12. Cholecystitis
13. Cholelithiasis
14. Constipation

Useful in digestive system diseases: -
1. Asana: - Vajrasana, supta vajrasana, ardhamatsyendrasana, paschimottana -sana, mayurasana, pavanmuktasana, katichakrasana, sarpasana, dhanurasana, sarvangasana, trikonasana, akarnadhanurasana, surya-namaskara.
3. Bandha: - Moola bandha, uddiyana bandha, etc.
4. Mudra: - Ashwini mudra, tadagi mudra, maha mudra etc.
5. *Kriya*:- Kunjala, vasti, sankhaprakshalana, Nauli, vastradhauti, agnisara etc.

6. *Dhyana*


**Contra-indication of yogic practices in different digestive disorders:**

In the following condition yogic practices specially *sadakriyas* should not be practised.

1. In acute and infective stage of any diseases i.e. acute appendicitis, gastric ulcer, ulcerative colitis, cholecystitis, jaundice etc.

2. Any condition when blood is coming out from mouth or anus.

3. In acute phase of any disease *sadakriya* may produce many complications.

   Limited use of other harmless yogic postures, *pranayana*, *mudra* and *dhyana* should be done with other curative procedures.

   But there is no contra-indication of *marma* therapy in the above-mentioned conditions. In these conditions *marma* therapy does not hurt the site of lesion. It gives positive effect on the affected site. One can perform *marma* therapy at any stage of disease.

**Effect of self-marma therapy and yogic practices on blood circulatory system**

During yogic practices heart and circulatory system play an important role. It is a well known fact that any work is not possible without energy. Oxygen and nutrients are generated in the muscles during yogic practices. So at the time of yogic practices the heart rate and arterial blood circulation also increases. By this process blood pressure also increases. Due to increased blood circulation the lungs also work rapidly. Body temperature increases due to different biochemical reactions in the muscles. Increased body temperature due to exercise is maintained by sweat glands; they produce more sweat. Many excretory substances are also excreted through the sweat. Following effects take place on the circulatory system, during yogic practices—

1. Regular self-*marma* therapy and yogic practices may produce some changes in the body. The working capacity of the heart improves by regular self-*marma* therapy and yogic practices. The heart pumps good amount of pure blood into the circulation so the oxygen and other nutrients are readily
available for better physiological activities of the body.

2. Regular self- marma therapy and yogic practices may lead to bradycardia. It provides better effect on the heart and the circulatory system. It improves the working capacity of the heart. During hard work the circulatory system gives better performance.

3. Regular self- marma therapy and yogic practices may lead to a number of biochemical changes in the blood. It increases the oxygen carrying capacity of the blood. Excretory metabolites and substances are taken away rapidly. So the concentration of excretory metabolites remains in lower level. Blood cholesterol decreases and the chances of heart attack are few in this condition.

4. Regular self- marma therapy and yogic practices may prevent the heart diseases. Patients of heart diseases may prefer high yogic practices like Kundalini jagaran and achieving Samadhi. By these practices the heart becomes healthier and strong.

5. By regular self- marma therapy and yogic practices the blood cells count increases. So the blood carrying capacity, disease-resistant capacity and immunity improves.

The general body build and outlook become healthy. There is marked improvement in body resistance power.

**Important organs of blood circulatory (cardio vascular) system:**

1. Arteries
2. Veins
3. Heart

**Important diseases of blood circulatory (cardio vascular) system:**

1. Hypertension
2. Congenital heart diseases
3. Cardiac vascular diseases
4. Coronary artery diseases
5. Pericarditis

**Useful in blood circulatory (cardio vascular) diseases:**

1. Asana:- Sheershasana, sarvangasana, shavasana, naukasana, halasana, karnapidasana etc.
2. Pranayama:- Bhastrika pranayama, nadi shodhana pranayama, anuloma-viloma pranayama, etc.
3. Mudra:- Tmmani mudra, shambhavi mudra etc.
4. Bandha:- Uddiyana bandha, mula bandha etc.
5. Satakriya:- Agnisara, vastra dhauti, kunjala etc.
6. **Dhyana**

7. **Marma therapy:** *Talahridaya, nabhi, hridaya.*

Contra-indication of yogic practices in different blood circulatory/cardio-vascular diseases:-

In the following conditions yogic practices should not be done

2. Cardiac failure
3. Acute pericarditis
4. Infective diseases of heart and blood vessels.

But there is no any contra-indication of *marma* therapy in above-mentioned conditions. In these conditions *marma* therapy does not hurt the site of lesion. It gives positive effect on the affected site. One can perform the *marma* therapy at any stage of disease.

Effect of self-*marma* therapy and yogic practices on respiratory system:

Every physical activity needs energy. Oxygen is necessary for the energy generation from the food material. Any exercise or hard work needs more oxygen, and for better oxygenation lung functions get affected. During yogic practices the respiration rate gets increased. In the lung, exchange of oxygen and carbon dioxide takes place at the cellular level in a better way. Oxygen absorption increases and removal of carbon dioxide becomes more pronounced. During this exchange energy is generated so the body temperature and respiratory rate may be raised.

Regular self-*marma* therapy and yogic practices may affect the body and mind. The following effects are noted on the respiratory system during yogic practices.

1. Regular self-*marma* therapy and yogic practices enhances the working capacity of the respiratory system especially the lungs and bronchial tree. Initially there is marked increase in the respiration rate during exercise but in the long run the respiratory rate does not get much affected even after vigorous yogic practice.

2. By regular self-*marma* therapy and yogic practices lung capacity increases. Vital capacity and tidal volume gets positive response.

3. Regular self-*marma* therapy and yogic practices improve the function of the muscles supporting the respiration.

4. Due to regular self-*marma* therapy and yogic practices especially *pranayama* oxygen consumption gets lower, so the respiration rate gets more slowed down. One can perform
all vigorous activities without increasing the respiratory rate.

**Important organs of respiratory system:**
1. Nose
2. Trachea
3. Lungs
4. Thoracic muscles
5. Diaphragm

**Important diseases of respiratory system:**
1. Rhinitis
2. Cough
3. Bronchitis
4. Pneumonitis
5. Tuberculosis
6. Bronchial Asthma

**Useful in diseases of respiratory system:**
1. **Asana:** Yoga mudra, singhasana, akarna dhanurasana, shavasana, paschimottanasana, pavanmuktasana, naukasana, sarvangasana, halasana, karnapidasana etc.
2. **Pranayama:** Nadi shodhan pranayam, bhastrika pranayama, suryabhedan pranayana etc.
3. **Satakriya:** Jalaneti, sutra-neti, kapala-bhati, kunjal-kriya, vastra-dhauti, nauli etc.
4. **Bandha:** Uddiyana bandha, jalandhara bandha etc.
5. **Mudra:** Viparita karani, mahamudra.
6. **Dhyana**
7. **Marma** therapy: Marma of head and neck and thorax.

**Contra-indication of yogic practices in different respiratory diseases:**

In following diseases yogic practice should not be done
1. Acute infective diseases of respiratory system.
2. Acute pneumonitis.
3. Haemoptysis.
4. Tuberculosis and complications.
5. Epistaxis.
6. Acute Rhinitis & Sinusitis.

But there is no any contra-indication of marma therapy in above-mentioned conditions. In these conditions marma therapy does not hurt the site of lesion. It gives positive effect on the affected site. One can perform marma therapy at any stage of disease.

**Effect of self-marma therapy and yogic practices on excretory**
Skin, kidneys and large intestine are the main excretory organs of the human body. Regular self- marma therapy and yogic practices give positive impact on these organs. Self- marma therapy and yogic practices affect these organs in the following ways—

1. During exercise the heart rate and pulmonary function improve. They work more efficiently. Consumption of oxygen increases and more carbon dioxide gets excreted. This removes a number of body ailments.
2. Sweat glands in the skin produce more sweat and due to excessive perspiration more metabolites are excreted through the sweat glands. It keeps the blood pure.
3. During self- marma therapy and yogic practices due to increased blood circulation in the brain, heart, kidneys and liver, the working capacity of these organs increases. The body becomes healthier. The kidneys play an important role in urine formation and excretion of metabolites through urine. Kidneys are the main blood filters. The liver plays an important role in the digestion of food. Bile formation takes place in the liver. From the liver bile comes into the gall bladder, shrinks, and the whole bile comes into the duodenum. Bile is important for the digestion of fat in many ways. But it contains many other metabolites, pigments, salts and excretory substances that also reach in the intestine and is evacuated through the faecal material and urine.
4. By regular self-marma therapy and yogic practices the working capacity of the organs of digestive system improves. Smooth muscles of gastro intestinal tract become stronger and digestion power improves. Excretion of excretory substances takes place in a better way. Yogic practices play an important role to improve the functioning of all excretory organs.

Important organs of urine excretory system: -

1. Kidneys
2. Ureters
3. Urinary bladder
4. Urethra

Important diseases of urine excretory system: -

1. Nephritis
2. Ureteritis
3. Cystitis
4. Urolithiasis
5. Haematuria
6. Oligouria and anuria
7. Prostatic enlargement

Useful yogic practices in urine excretory system: -
1. Asana: - Ardhamatsyendrasana, matsyendrasana, ustrasana, trikonasana, paschimottanasana, naukasana, pavanmuktasana, supta-katichakrasana, kati chakrasana, bhuganagasana, mayurasana, dhanurasana, halasana, bhunamanasana, hastapadangysthasana, surya namaskara etc.
2. Pranayama: - Nadishodhana pranayana, bhasrika pranayana etc.
3. Bandha: - Mula bandha, uddiyana
4. Mudra: - Ashwinimudra, tagadimudra, mahamudra, bajrali mudra etc.
5. Kriya: - Vasti, nauli, sankha prakshalana, agnisarakriya, kunjala etc.
6. Dhyana
7. Marma therapy: - Parsvasandhi, guda, vasti, nabhi and marmas of lower extremity.

Contra-indication of yogic practices in different diseases of urine excretory system: -
In the following urine excretory system diseases yogic practices should not be done.
1. Acute uraemia/ azotemia
2. Urolithiasis
3. Hematuria
4. Acute urinary tract infection
5. Malignant growth of urinary system.

But there is no any contra-indication of marma therapy in above-mentioned conditions. In these conditions marma therapy does not hurt the site of lesion. It gives positive effect on the affected site. One can perform the marma therapy at any stage of disease.

Effect of marma therapy and yogic practices on endocrine and exocrine glands: -
There are two types of glands
1. Endocrine gland
2. Exocrine gland
Those glands are endocrine which are ductless. Secretion of these
glands directly enters into the blood circulation.

Pituitary, thyroid, parathyroid thymus and adrenals are the main endocrine glands. Pancreas, ovary and testicle are combined glands. Some of these secrete enzymes, ova and sperms are transported into intestine, uterus and urethra. Salivary glands, sweat glands and glands situated in the stomach and intestine secrete their secretions.

In reference to sweat glands, any exercise increases the excessive sweating. Yogic practices increase the blood circulation of the glands. Due to increased blood circulation, the function of these glands improves. So the body immunity and secretion of these glands affect the function of many organs.

By regular yogic practices the function of these glands can be affected. In the healthy individual yogic practices may activate the function of these glands. Health promotion is possible by activating the endocrine and exocrine glands.

I Regular yogic practices and marma therapy improve the function of glands.

II Glands secrete good amount of hormone.

III The quality and composition of hormones becomes more balanced.

IV It improves the body immunity and decaying/ageing process can be delayed.

Important Glands are-
1. Pituitary gland
2. Thyroid gland
3. Parathyroid gland
4. Thymus gland
5. Pancreas gland
6. Adrenal glands

Important diseases of endocrine glands:
1. Thyroid swelling
2. Diabetes
3. Infertility

Useful yogic practices in different endocrine gland diseases:

1. Asana: - Siddhasana, matsyendrasana, yoga mudra, mayurasana, shirshasana, paschimottanasana, pavan muktasana, suptakatichakrasana, trikonasana etc.

2. Pranayama: - Nadi shodhana, bhastrika, bhramari, surya bhedi, dhauti, udayana yukta pranava uchcharana(japa) etc.

3. Bandha: - Mula bandha, uddiyana bandha, jalandhara
4. Mudra: - Khechari mudra, shambhavi mudra, ashwini mudra etc.
5. Kriya: - Jalaneti, sutra neti, kunjala, vasti, trataka etc.
6. Dhyana

Contra-indication of yogic practices in different diseases of endocrine system: -

In the following endocrine system diseases yogic practices should not be done.
1. Acute haemorrhagic conditions of endocrine system.
2. Traumatic lesions of endocrine system.
3. Acute endocrine infection.
4. Malignant growth of endocrine system.

But there is no any contra-indication of marma therapy in above-mentioned conditions. In these conditions marma therapy does not hurt the site of lesion. It gives positive effect on the affected site. One can perform the marma therapy at any stage of disease.
The word *asana* can be commonly translated as posture. Its literal meaning is the seat or posture adopted during meditation, which promote the mental concentration. As a rule a healthy mind lives in a healthy body, and these postures give a positive effect on health and may cure a number of diseases.

As you know we adopt some postures for different routine or specific works. As for cycle or motorcycle driving we have to adopt a specific posture, or office work or computer work needs sitting posture on a chair, in the same way, during self-*marma* therapy we have to adopt specific postures to derive maximum benefit from the technique.

How do yogic postures and *pranayama* affect the body and mind? What is the scientific explanation of it? How one can reenergize the body and mind by adopting some specific postures for a few minutes? These are few questions, which come in the mind of a yoga student or practitioner.

In reply to these questions it is very important to understand the importance of *marma* points. These *marma* have control on different body functions and any trauma to these parts may give rise to many complications. By yogic postures and *pranayama*, by their stretch, pressure, vibration and rhythmic movement, the activity of *marma* get affected. It also affects the functioning of the organ related to the particular *marma*. It is apparent that the yogic postures and *pranayama* affects the body and mind by the stimulation of *marma*. All the yogic postures in which the body is moved forward and backward affect the *marma* of abdomen, chest and back. These *marma* can be energized by regular practice of *yoga* and *pranayama*.

One can achieve the same benefits of exercises with the self-*marma* therapy. As we know that exercise is necessary for the body strength and normal body functioning, we can say that self-*marma* therapy is a short cut key to the *yoga*, *pranayama* and other physical exercises.

The important yogic postures and *pranayama* are discussed with their effects.
Lotus Pose (Padmasana):-

In this posture the base of the legs looks like a lotus. So it is known as Padmasana. To make the proper lotus pose sit on the floor with crossed legs. Raise the left foot up onto right thigh, as near to the anterior part of right hip joint as possible; place right foot on the left thigh, near to the anterior part of the left hip joint. During this posture the knee should be placed on the surface and the soles should be in upward direction. Keep the head, neck, and spine in a straight line; hands should rest on knees. This is the best pose for meditation. During this pose breathe naturally. Women are suggested to reverse the legs, placing the left foot on top.

Benefits:- Regular practice of Lotus pose calms the mind and pushes the prana into sushumna. The position of the crossed legs holds the spine in its natural curve; allows the vital organs to fall into correct position; gives rest to the heart; and makes hips, knees and ankles flexible. Regular practice of padmasana improves the psychosomatic functions. It purifies the whole nervous system of the body by the energy accumulated at muladhara chakra. When the whole nervous system gets purified it is helpful to keep the body healthy physically and mentally. So this posture is useful in many psychosomatic disorders and helps in a number of sexual ailments.

In this posture both heels are paced over the vitapa marma. During lotus pose continuous pressure over vitapa marma is helpful in inguinal hernia, hydrocele, varicocele and it improves the function of the urogenital system. When a person practices the aswini mudra during lotus pose it stimulates the central nervous system and it cures haemorrhoids, prolapsed rectum, prolapsed uterus, benign prostatic hyperplasia and atony bladder. For self-marma therapy it is the most suitable pose for the stimulation of marma of lower extremity especially kshipra, tala hridaya, kurca and kurcasira. This postures stimulates the marma of lower extremity especially gulpha(ankle joint) and janu (knee joint).
Adept’s or Proficient Pose (Siddhasana):

It is the most popular pose of yogis. Regular practice of adept’s pose provides many physical and spiritual gains. After sitting on crossed leg posture place left heel under the testicles and lift the right heel resting on the genitalia and over the left heel. Head, neck and spine should be in a straight line. There should be no extra pressure on the genitalia and testicles. Women should place left heel in front of anus, right heel on top of left. Keep head, neck, and spine in a straight line and breathe naturally.

Benefits:- Adept’s pose purifies the nervous system. It helps in maintaining celibacy or continence. It pushes vital energy, prana, into susumna. In this posture the heels provide pressure on guda and vasti marma and it is helpful to eradicate the diseases of anorectal region and urogenital system. It is very useful in atony bladder, retention of urine, urinary incontinence, benign prostatic hyperplasia and anorectal disease. After the age of 45 years every person should practice adepts pose regularly to avoid the urogenital problems. This
pose is highly recommended for meditation.

**Cow’s Head Pose (Gomukhasana):**

To adopt Cow’s Head pose sit with right leg folded over left; as a result the right knee will be above the left knee. Try to bring the feet towards the back, resting at the side of the hips. Raise right arm overhead and bend the elbow so that the hand hangs down at the back. Place left hand behind back and take hold of right hand. Breathe in slowly and extend by pulling up with right arm and down with left arm. Hold the breath during pose, keeping spine, neck and head in straight line, right arm up and held down with left arm. Breathe out slowly, reversing legs and arms. Repeat the pose on the other side in the same manner. Persons who cannot clasp the hands may bring together the upper hand and lower hand as much as possible.

**Benefits:**
- Regular practices of Cow’s Head pose strengthens the spine. It aids in celibacy, helps remove muscular pains in the back and shoulders, cures abdominal weaknesses, and alleviates indigestion and insomnia. In this pose, marmas of the back, thorax and abdomen, and upper and lower extremities get affected.

**Shoulder Stand Pose (Sarvangasana):**

To adopt this pose lie flat on the back with arms parallel to body. Raise legs slowly until they make a right angle with the body trunk. Then with the arms flat on the floor raise the body straight up on
shoulders with the head and shoulders resting on the ground, balance on the shoulders and breathe naturally. One can support the back with the hands during this pose.

**Benefits:** - it strengthens the entire body. It regulates the functions of thyroid and parathyroid glands. It improves the metabolic activities of the body and the function of endocrine system, cardiovascular system, respiratory system and nervous system. One can get all benefits of headstand pose. In this pose the blood circulation increases in chest, neck and brain.

In this posture amsa, amsa phalaka, vrihati, parsvasandhi, hridaya, stanamula, stanarohita, apalapa, all marms of neck and head get affected.

**Sarvangasana**

**Plough Pose (Halasana):**

In continuation of the Shoulder Stand pose, lower the legs over the head keeping knees and arms straight. Touch the floor with the toes. After a few seconds inhale slowly and return back to shoulder stand pose. In the same way ear-knee pose (karnapidasana) can be adopted by bending legs and bringing knees forward and towards the ears.

Hold the breath out in the pose; then inhale slowly and return to shoulder stand and inhale slowly, then exhale into the ear-knee pose. The plough pose is complementary to the bow pose.
Benefits: - In addition it tones spinal nerves, muscles of the back, and the sympathetic nervous system. Makes the spine flexible, prevents laziness, and relieves constipation. In this posture amsa, amsa phalaka, vrihati, parsvasandhi, hridaya, stanamula, stanarohita, apalapa, all marmas of neck and head get affected. Krikatika marma is very much affected during the flexion of neck over the chin.

Wind-Releasing Pose (Pavanmuktasana):-
To adopt this pose lie on the back, inhale slowly and fold the left knee onto the chest, pulling it firm by clasping the hands around it, trying to touch head to knee, keeping the right leg straight. Hold the breath during pose; subsequently exhale while lowering leg and head. Repeat with right leg; and then with both legs together.

Benefits: - Releases abdominal flatulence, improves indigestion, and reduces abdominal fat. It gives positive effect on the inflammatory lesions of large intestine and other abdominal organs. In this posture vitapa, lohitaksha, vasti and nabhi and thorax marma get affected.
Fish Pose (Matsyasana):-

To adopt this pose lie on the back with arms at the sides; then, by pushing down on the floor with the elbows, inhale slowly and curve the back so that the top of the head rests on the floor. Try to raise the chest as high as achievable. Place hands on chest, palms together, with fingers pointing towards chin. Hold breath in pose; then exhale slowly and return to starting position. The Fish pose is a counter pose for the Shoulder stand, and is complementary to the Rabbit Pose (sasakasana).

Benefits: - Regular practice of the Fish pose expands the chest, strengthens the lungs, and brings oxygenated blood to the thyroid and parathyroid glands. It is useful for asthma and bronchitis. In this posture kakshadhara, vitapa, lohitaksha, vasti and nabhi and thorax marma get affected. It also affects the krikatika, adhipati and simanta marmas.

Cobra Pose (Bhujangasana):-

To adopt this pose lie face down on the floor. Place palms on floor at the side of shoulders. Inhale and slowly raise head and chest, arching the neck in hyper extension looking up and back. Hold breath during pose; subsequently exhale and come down slowly. This pose is complementary to the back-stretching exercises.

Benefit: - Regular practice of Cobra pose makes the spine stretchy; relieves gastro-intestinal disorders; expands the chest, in this manner strengthening the lungs and heart; awakens kundalini. The cobra pose is recommended for women after childbirth because it strengthens the reproductive organs and other organs of thorax and abdomen. In this posture kakshadhara, vitapa, lohitaksha, vasti and nabhi, thorax marma and marma of lower extremity get affected.
Bhujangasana

Bhujangasana (Bow Pose):

To adopt this pose lie face down on the floor. Bend the knees, try to reach back and hold the ankles with hands. Inhale and try to lift head, chest, and thighs as high as possible, stretching the body into a bow shape. Try to keep the head back. Hold breath during pose; subsequently exhale slowly releasing legs and coming down. The Bow pose is opposite to the Plough pose.

Benefits: - Regular practice of the Bow pose strengthens the spine, intestines, liver, and kidneys; improves digestion; reduces fat; and makes the body flexible. In this posture vitapa, lohitaksha, vasti and nabhi and thorax marma and marma of lower extremity get affected.

Wheel Pose (Chakrasana):

To adopt this pose lie on the back, put the hands beside the ears, palms down and fingers pointing towards the feet. Try to bend the knees and pull the feet close to the hips. Subsequently inhale slowly and raise body up and try to balance on hands and feet. Hold
breath during pose; afterwards exhale at the same time as lowering the body back to floor.

**Benefits:** Regular practice of Wheel pose affects the whole body, especially the spine; strengthens the upper and lower extremities. It gives vitality, strength, energy and sensation of lightness. In this posture vitapa, lohitaksha, vasti and nabhi and thorax marma and marma of back and both extremities get affected.

**Half Spinal Twist Pose (Arda Matsyendrasana):**

To adopt this pose sit with right heel folded at the side of the left hip. Try to raise the left knee, cross left foot over the folded right leg. Put left foot flat on floor beside the right thigh. Try to bring right upper arm around to the outside of left knee and grab left foot with right hand. Bend left arm behind back, inhale, and twist spine and head to the left, looking back over the left shoulder as far as possible. (Straighten spine, neck, and head by stretching torso upward before twisting.) Hold breath during pose; afterwards exhale and untwist slowly. Reverse legs and arms and repeat.

**Benefits:** Regular practice of Half Spinal Twist pose gives strength, flexibility to the body and oxygenated blood supply to the spine and abdominal organs. It increases appetite, metabolic process and digestion. Retards aging; tones the nervous system; and strengthens the reproductive glands. In this posture vitapa, lohitaksha, vasti and nabhi and thorax marma and marma of back and both extremities get affected.
Yogamudrasana:

Sit in Lotus pose. Cross arms behind the back and grab the left big toe with the left hand, and the right big toe with right hand, or simply grip left wrist with right hand behind the back. Inhale deeply, then exhale and slowly bend forward, resting forehead on the floor. Hold breath out in pose; then inhale and sit up.

When used as a meditation posture, breathe naturally and concentrate on ajna chakra.

Benefits: - It intensifies the benefits of Lotus pose. It also increases memory and gastric fire; strengthens the spine, waist, lungs, heart, and abdomen. In this posture vitapa, lohitaksha, vasti and nabhi and thorax marma and marma of back and both extremities get affected.
Nobility Pose (*Bhadrasana*):-

Sit on the floor. Bring soles of feet together, clasp hands around feet, and pull heels in as close to the body as possible. Inhale slowly and press knees down towards the floor, keeping spine, neck, and head in a straight line. Hold breath in pose. Concentrate on *ajna chakra*. Exhale slowly and release.

In a variation hands are placed on the knees, pressing them down gently. The Nobility pose can be used as a meditation pose, breathing naturally.

*Benefits:* - Relieves urinary disorders and sciatic pain; keeps the kidneys, prostate, bladder, and ovaries functioning properly; strengthens the reproductive glands and aids in celibacy. Recommended for women, as it helps regulate the menstrual cycle; also recommended during pregnancy. In this posture *vitapa, lohitaksha, vasti* and *nabhi, guda* and thorax marma and marma of back and both extremities get affected.

Frog Pose (*Mandukasana*):-

To adopt this pose sit in Thunderbolt pose and close the hands by putting thumbs inside. Now place both the closed hands around the umbilicus and try to bend forward, exhaling breath and keeping sight forward. Keeping this pose for a while come back to the Thunderbolt pose. This can be repeated three to five times.

*Benefits:* - during this pose there is direct pressure on abdominal organs. It improves the function of the pancreas. It increases the amount of insulin and improves the quality of gastric and liver juices.
It is good for abdominal ailments. It improves the function of heart and lungs. In this posture vitapa, lohitaksha, vasti and nabhi and thorax marma and marma of back and both extremities get affected.

**Mandukasana**

**Peacock Pose (Mayurasana):**

Kneeling on the floor, with arms resting in front of the body on the palms, inhale and bring head off the floor by shifting the body slightly towards the feet. Then raise the legs by shifting body forward again. Hold breath while balancing on the hands; then exhale slowly lowering head and feet. Either return to kneeling position or relax in the Reverse Relaxation Pose. *(Uttana Shavasana)*

**Benefits:** Increases digestive fire, alleviating indigestion and constipation; is helpful for diabetes, haemorrhoids, and inflammation of the intestines or liver; stimulates circulation of blood in the abdomen; tones the lungs; rouses kundalini; and strengthens the wrists, arms, and abdominal muscles. In this posture vitapa, lohitaksha, vasti and nabhi and thorax marma and marma of back and both extremities get affected.

**Thunderbolt Pose (Vajrasana):**

Kneel and sit on calves, knees together. Place hands on knees, keeping arms and back straight. Either close the eyes, or focus on the tip of the nose. Breathe slowly and deeply. This pose can be used for meditation.

This is the one asana that may be practiced directly after eating.

**Benefits:** Calms the mind; aids digestion.
In this posture vitapa, lohitaksha, vasti and nabhi and thorax marma and marma of back and both extremities get affected.

**Vajrasana**

**Lying Thunderbolt Pose (Supt vajrasana):**

To adopt this pose sit in Thunderbolt pose and try to lie on the back. In this posture both thighs should be placed together. Hands should be kept on thighs. During the reversal of pose take the support of elbows and hands.

**Benefits:** Regular practice of Lying Thunderbolt pose gives stretch on lower abdominal part and lower extremity. It stimulates the function of large intestine and regulates the bowel. It is useful in haemorrhoids, constipation and the diseases of urogenital system. In this posture vitapa, lohitaksha, vasti and nabhi and thorax marma and marma of back and both extremities get affected.

**Relaxation Pose (Shavasana):**

To adopt this pose lie flat on the back like a corpse, keeping arms at the sides and head rolled slightly to one side. Close eyes and relax; breathing should be natural. The mind should be calm and thoughtless.

Practice the Relaxation pose after each series, or after several strenuous poses, for fifteen to twenty seconds. At the end of asana practice, do this pose for five to ten minutes. It is also recommended to practice this after pranayama and meditation.

**Benefits:** The Relaxation pose facilitates blood circulation; it relieves fatigue and reduces stress and depression. Practice of Relaxation
pose gives soothing effect on total body marma.

**Conclusion about Marma and Yoga**

In concluding this section on Yoga and Marma, we can therefore see the close and astounding inter-relationship between the two practices, the practice of Marma being inherent in the Yogic postures. In all the higher yogic practices as well, like the various pranayama and mudras, as well as concentration / meditation on the chakras, various marma points get affected and stimulated. Thus, it can be remarked, extending this perception, that self-marma therapy in itself can be considered as a Yogic practice.
Section Four

MARMA SCIENCE, SIMILAR THERAPIES AND CONCLUSIONS
Traditional medical sciences of south East Asia, Japan and China combine the therapies of acupuncture, shiatsu, moxa, tsubo, kampo and anma (The meaning of the word tsubo symbolizes an earthen pot vessel or jar.). Tsubo are places of special importance on the human body. Tsubo are the vital points, situated on the meridians, and have to be located by exercising special sensitivity. These are points on the body surface, where exerting the pressure can alleviate the various clinical symptoms.

The tsubo has immense importance in traditional/ oriental medicine of Mongolia, China, Japan, Korea and South East Asia. Its astounding results have popularized tsubo. Acupuncture anesthesia has received worldwide attention and recognition. In different parts of the world, the Oriental Medicine developed through the long experience of thousands of years. The Oriental Medicine is also called kampo, having mainly two branches; one has developed in the Yellow river basin and another from the Yangze river basin of China. The former branch is acupuncture and moxibustion that includes anma or traditional massage. Today anma has developed into a specialized massage technique, by which they cure a number of bodily ailments which can thus be relieved. The locations of most effective points for aforesaid treatment on the body are called tsubos. In herbal medicine the roots of plants and bark of the trees were used to treat diseases, because herbal remedies were often not very effective in surgical disorders and in preventing the infectious or contagious diseases, so it went out of the mainstream of the conventional methods of treatment.

The Oriental Medicine has a fundamental framework supported by long tradition of empirical knowledge from successful cure of diseases. The fundamental principle of Oriental Medicine is based on the concept of six zang and six fu. The principles of Oriental Medicine follow Nature. All manifestations in Nature are widely divided into either yin or yang. It represents the phenomena of day and night, light and dark, hot and cold. For example, male is yang and female is yin.

According to Oriental Medicine, the nature is made up of five basic elements i.e., plants, heat, earth, minerals and liquids. All
creatures of the nature are classified as wood, fire, earth, metal or water. So the Oriental Medicine is based upon the yin-yang and five elements theory. The human body also follows the yin-yang and five-element theory, and these principles are applied to all aspects of human life. All body organs are either yin (zang) or yang (fu) and are made up of five elements.

These five basic elements are associated with a yin organ or a yang organ. The five essential organs are liver, heart, spleen, lung and kidney. The liver is associated with wood, the heart is associated with fire and the spleen, lung and kidney are associated by earth, metal and water respectively. In Oriental Medicine these organs do not represents the same meaning as stated in modern medicine.

Human life is not sustained fully by the five essential organs (zang/yin). There are also (fu/yang) organs which form collateral or paired relationship with the (zang/yin) organs to maintain the normal body functions. For example, the gall-bladder is the yang organ (fu) that assists the liver yin organ (zang). The heart is combined with the small intestine and the spleen/pancreas is paired with the stomach. The large intestine gives assistance to the lungs and the urinary bladder helps the function of kidneys. These combinations of the above-mentioned ten organs are called five zang and five fu. There is one more zang-fu combination mentioned in Oriental Medicine. The heart constrictor (pericardium) is the yin organ which is paired with the triple heater yang/fu organ. The triple heater is the point, which maintains the metabolism and keeps the body warm throughout the life span. It is the source for the production of energy in terms of body temperature. This combination is not apparently an anatomical entity. It seems a physiological entity.

In Oriental Medicine, the six zang are the liver, heart, spleen, lungs, kidneys and heart constrictor, and six fu are the gall-bladder, small intestine, stomach, large intestine, urinary bladder and triple heater. The zang are the yin organs and the fu are the yang organs.

The whole physiology of the human body is under the control of the six zang and six fu. Derangement of the function of any of these organs may affect the whole of the body; by this process the microcosm is deprived of mental and bodily energy. In Oriental Medicine, there is the concept of circulatory system of energy in the human body that passes through the six zang and six fu to supply them with the vital energy.

These energy circulating channels are called meridians and pass in a vertical direction while collaterals pass in horizontal direction. The circulation of vital energy flows through the six zang and six fu meridians, vertically and horizontally, throughout the body. The twelve meridians are named as lung meridian, large intestine meridian,
Comparison between Marmas and Tsubo (Acupressure points)

After doing the analytical study of Indian medicine and Oriental Medicine of Southeast Asia, a number of similarities are found. In origin both are developed from a long experience. Ayurveda, the oldest system of medicine of the world flourished all around the Indian subcontinent. By comparing these two medical sciences it is apparent that both are linked closely. Ayurveda crossed the boundaries of Indian subcontinent with the spread of Brahmanism and Buddhism and transformed in many ways in different countries. Marmas and tsubo both are vital points of the body and seats of life and energy. Both the sciences have the same fundamental principles. In Ayurveda the universe is made up of soma, surya and panchamahabhuta. It is same as in Oriental Medicine of Southeast Asia. There is great similarity in both these disciplines of medicine.

After discussing the similarities between the marma science and Oriental Medicine, it is time for the assessment of differences between these two systems. On fundamental aspect the marma science is more scientifically assessed and described. The nature, types, constituents and effect of trauma on marma points is well defined precisely in comparison to acupressure or tsubo points. This covers physical properties like agneya, vayavya, saumya, saumyagneya and structure contents like mansa (muscles), sira (blood vessels), snayu (ligaments), asthi (bones), sandhi (joints). The location of the marma points themselves as also the method of applying pressure may vary in comparison to acupressure. Also, regular marma stimulation by oneself, as different from marma therapy in disease condition, is indicated in our religious texts as a daily spiritual practice for revitalizing the system.

In fact, in ancient times, in the Vedic tradition, it was mandatory and part and parcel of daily spiritual, religious practices and rituals to concentrate or remember and touch/press these marma points regularly. In Rudrabhisheka (offering to Lord Shiva) marmachchhadana was mandatory prior to the main offering. In offering to different gods and goddesses it is present in the form of karanyasa and anganyasa. In these references general terms are used for marma points. Nabhi (umbilicus), hridaya (heart), sira (head), bahu (arm), prishta (back), kantha (neck), karatala (palm), karatalapristha (back of hand), manibandha (wrist joint) are some places discussed in these religious/spiritual texts.

In the texts of Indian surgery (Susruta Samhita), exact
descriptions of each and every marma point is available, but without study and practice it is difficult to identify the actual location of marma points. After proper study and training under a marma expert it is very simple to assess these points in the human body. Before knowing the process of assessing these points one has to give proper attention to human postures which we adopt during our daily activities. In this reference we have to overview our postures while sleeping, lying, sitting, standing, walking and during other activities.

These days we are very much concerned with the poses of different animals and articles, in the form of yogasanas i.e. Makarasana, Bhujangasana, Halasana etc. But we are least concerned with the human postures which we adopt in our day to day life. Whenever we fold the fingers, hand, elbow, ankle, leg, knee, neck and head in specific direction marma points of that particular place can be assessed easily. For example when we fold the middle finger over the palm where it touches there is talahritdaya marma. When we fold the arms with one another in cross position where the thumbs of both hands touch the inner side of upper arms there is the ani marma. When we sit on the floor by folding the knees back, where the heels touch the buttocks there is the katikataruna marma.

As a matter of fact the resultant of marma therapy comes within a couple of minutes. It is a rapid acting, instant and permanent way of cure in a number of physical and mental ailments. As we know all medical sciences, yoga, ayurveda, allopathy, homeopathy, unani, siddha, and other oriental medicine are developed by human beings. But this marma science represents the inherent power of healing in the human body provided by Nature/Almighty God.

In comparison it is easy to understand that when a man walks over the sand, the foot prints remain on the ground. We can imagine the presence of some one who walked over the ground but the foot impression is not the person. In the same way, in the mirror, the image of a person is different from the person. Other oriental medical practices are the image or foot prints of marma science which are popular in different parts of the world now.

It is believed that in Ayurveda instant emergency management of disease and pain management is not available, but with marma therapy we can bridge the gap of this lacuna effectively. The Indian system of medicine (Ayurveda), even now gives medical relief to a very large section of the Indian population. In the present times, the saturation point has come in the field of western medicine. The side effects of many Allopathic medicines are obvious. Scientists and researchers are very keen to offer an alternative medical system to suffering humanity of the world. Ayurveda and marma science can fulfill these criteria.

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Conclusion

It is said that there was nectar in the umbilicus of Ravana. Lord Rama fired an arrow into the umbilicus of Ravana causing his death. Lord Krishna was killed by the injury of an arrow, on the sole of his foot, thrown by a bird killer. As we know that Bhima pitamaha (of Mahabharata) was injured by a number of arrows pierced in his body but he lived with arrows for six months. It was only due to the safety of the vital marma points. The site of injury was not having any important vital points. In another example Jesus Christ was nailed on a cross by putting nails on the palms and soles containing important vital points. With these examples it is apparent that any injury to vital points may lead to death. A tree does not die when the flowers, fruits and leaves are picked but when the root is severed the tree dies immediately. The same thing is applicable with reference to the marma points. Any injury to these points may be fatal. So the protection, stimulation and nutrition to these points may help in physiological functioning of the body. One should protect these vital points carefully.

Self-marma therapy converts the total negative energy of the body into positive energy. Due to injury this process becomes obliterated and acts against the body physiology. All the stimulations from the body to brain carry negative energy. With the effect of this negative energy the sense organs cannot engage in their subjects properly. So this feeling becomes painful. In this condition marma therapy can convert the feeling of illness into a feeling of joy and happiness. With self-marma therapy regularization and control of all the body energies is possible. Regular self-marma practice prevents all those ailments which are generated by the daily household tasks. Pain in extremities, backache, joint pain, muscular spasm and compression of nerve root due to slip disc and vertebrae can be easily treated by marma therapy. Regular self-marma therapy can provide all the benefits of yoga, pranayama, aerobics and other physical exercises. The biochemical changes which are produced by yoga, pranayama, aerobics, weight lifting and other exercises in the body are available within minutes with self-marma therapy. Self-marma therapy is the easiest and shortest way of exercise. Apart from
energizing the body a number of diseases can be treated by marma therapy.

To popularize marma therapy it is important to observe the effect of marma therapy in different orthopaedic and neuro-muscular diseases in a large scale. In the present times, the development of marma therapy as harmless, cheapest and easiest therapy is the need of the day. For this purpose we have to take responsibility to spread the self-healing technique in terms of marma therapy. One of the great services we can render is to concentrate our efforts and mind on healing, this being a noble cause. It is true that without our heartfelt involvement, assistance and participation, this science cannot flourish or carry on. It is advisable to judge this science, learn this science, research this science, work hard for this noble cause everywhere we live and spread it with the spirit of offering to suffering humanity.

As a hobby one can enjoy the essence or benefits of marma chikitsa by practicing on himself and in the family and society. This is quite evident as many people are interested to help others in day-to-day life. Marma chikitsa is the best way to offer our services to society. It is very simple to learn this medicine-and-surgery-less option, — marma therapy. Initially one can learn and practice self-marma therapy keeping the few things required in mind. It is very effective in acute neurological lesions. But one has to apply marma therapy cautiously and gently.

For promotion and propagation of research, training, therapy in all aspects of marma science, the objectives are:-

- To revive the Vedic surgical skill especially in terms of marma science.
- To act as a center of excellence in marma science.
- To develop, promote and propagate the marma science along with Ayurveda and yoga.
- To provide and promote facilities for training in the field of marma science.
- To conduct research activities in various aspects of marma science and therapy.
- To standardize the methodology and curriculum for marma science education and training.
- To render facilities for training in the field of marma therapy.
- To promote marma science at national and international level by organizing workshops and conferences and propagate through print and audiovisual media.
Marma Science and Principles of Marma Therapy

- To develop collaboration between different institutions existing for the cause including the coordination of the concepts and activities of various institutes of martial arts
- To utilize the results of existing knowledge about marma science for the betterment of suffering humanity.

Lastly we can summarise marma therapy as a system with the dual advantage of disease control with instant symptomatic response and permanent cure without adverse effect. In this way, with marma science we can promote health and vitality for daily life and obtain freedom from disease and suffering and disharmony. Spread and practice of Marma science can contribute to more peace in these disturbing times.

_Sarve Bhavantu Sukhinah Sarve Santu Niramayah,
Sarve Bhadrani Pashyantu Ma Kashchid Dukha Bhagbhavet._
## Appendix

### Consolidated Description of Marma

<table>
<thead>
<tr>
<th>Name</th>
<th>No.</th>
<th>Location</th>
<th>Type</th>
<th>Resultant</th>
<th>Anatomical description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Kshipra</td>
<td>2</td>
<td>Upper Extr.</td>
<td>Ligament</td>
<td>Delayed Fatal</td>
<td>First intermeta carpal ligament</td>
</tr>
<tr>
<td>2. Kshipra</td>
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<td>Lower Extr.</td>
<td>Ligament</td>
<td>Delayed Fatal</td>
<td>First intermeta-tarsal ligament</td>
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<td>3. Talahrdaya</td>
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<td>Muscle</td>
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<td>Palmer aponeurosis</td>
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<td>4. Talahrdaya</td>
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<td>Muscle</td>
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<tr>
<td>5. Kurca</td>
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<td>Disabling</td>
<td>Carpo-metacarpal and intercarpal ligament</td>
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<tr>
<td>6. Kurca</td>
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<td>Ligament</td>
<td>Disabling</td>
<td>Tarso-metatarsal and intertarsal ligament</td>
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<td>7. Kurcasiras</td>
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<td>Ligament</td>
<td>Painful</td>
<td>Lateral ligaments of the wrist joint</td>
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<tr>
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<td>9. Manibandha</td>
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<td>10. Gulpha</td>
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<td>12. Indravasti</td>
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<td>Delayed Fatal</td>
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<td>15. Ani</td>
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<tr>
<td>16. Ani</td>
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<tr>
<td>17. Urvi</td>
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<td>Brachial artery, Bacilic vein</td>
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<td>18. Urvi</td>
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<td>Ligament</td>
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<td>21. Lohitaksa</td>
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<td>23. Gida</td>
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<td>Muscle</td>
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<td>Anal canal and anus</td>
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<td>24. Vasti</td>
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<td>Ligament</td>
<td>Fatal</td>
<td>Urinary bladder</td>
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<tr>
<td>25. Nabhi</td>
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<td>Blood Vessel</td>
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<td>26. Stanamula</td>
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<td>Delayed Fatal</td>
<td>Internal mammary vessels</td>
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<td>-------------------------------------------------------------</td>
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<td>27. Hridaya</td>
<td>1</td>
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<td>Blood Vessel</td>
<td>Fatal</td>
<td>Heart</td>
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<td>28. Stinarohita</td>
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<td>Muscle</td>
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<td>Lower portion of Pectoralis major muscle</td>
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<td>29. Apalapa</td>
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<td>Lateral thoracic and subscapular vessels</td>
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<td>Two bronchii</td>
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<td>31. Katikataruna</td>
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<td>Bone</td>
<td>Delayed Fatal</td>
<td>Sciatic notch</td>
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<tr>
<td>32. Nitamba</td>
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<td>Bone</td>
<td>Delayed Fatal</td>
<td>Ala of the ileum/Ischial tuberosity</td>
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<td>33. Kukundara</td>
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<td>Sacroiliac joints</td>
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<td>34. Parvvasandhi</td>
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<td>Delayed Fatal</td>
<td>Common iliac vessels/Renal angle</td>
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<td>35. Vrihati</td>
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<td>Blood Vessel</td>
<td>Delayed Fatal</td>
<td>Subscapular &amp; transverse cervical arteries</td>
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<tr>
<td>36. Amsaphalaka</td>
<td>2</td>
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<td>Bone</td>
<td>Disabling</td>
<td>Spine of the Scapula</td>
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<td>37. Amsa</td>
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<td>Ligament</td>
<td>Disabling</td>
<td>Coraco-humoral, gleno-humoral ligament Trapezius muscle</td>
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<td>38. Krikatika</td>
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<td>Joint</td>
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<td>Atlanto-occipital articulation</td>
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<td>40. Matrika</td>
<td>8</td>
<td>Neck</td>
<td>Blood Vessel</td>
<td>Fatal</td>
<td>Blood vessels of the neck</td>
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<td>41. Vidhura</td>
<td>2</td>
<td>Head</td>
<td>Ligament</td>
<td>Disabling</td>
<td>Posterior auricular ligament/Vessels</td>
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<tr>
<td>42. Phana</td>
<td>2</td>
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<td>Blood Vessel</td>
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<td>Kiesselbach’s plexus in little’s area/Olfactory region of the nose</td>
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<td>43. Apanga</td>
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<td>Disabling</td>
<td>Zygomatico-temporal vessels</td>
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<tr>
<td>44. Avarta</td>
<td>2</td>
<td>Head</td>
<td>Joint</td>
<td>Disabling</td>
<td>Junction of the frontal, molar and sphenoid bone</td>
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<tr>
<td>45. Uktepa</td>
<td>2</td>
<td>Head</td>
<td>Ligament</td>
<td>Fatal after f.b.*</td>
<td>Temporal muscle and fascia renival</td>
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<tr>
<td>46. Samkha</td>
<td>2</td>
<td>Head</td>
<td>Bone</td>
<td>Fatal</td>
<td>Temples</td>
</tr>
<tr>
<td>47. Sthapani</td>
<td>1</td>
<td>Head</td>
<td>Blood Vessel</td>
<td>Fatal after f.b.*</td>
<td>Nasal arch of the frontal vein</td>
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</table>
### Marma Science and Principles of Marma Therapy

<table>
<thead>
<tr>
<th>Name</th>
<th>No.</th>
<th>Location</th>
<th>Type</th>
<th>Resultant</th>
<th>Anatomical description</th>
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<tbody>
<tr>
<td>Simanta</td>
<td>48</td>
<td>Head</td>
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<td>Delayed</td>
<td>Fatal Cranial sutures</td>
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<td>Srngataka</td>
<td>49</td>
<td>Head</td>
<td>Blood Vessel</td>
<td>Fatal</td>
<td>Cavernous and inter-cavernous sinuses</td>
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<tr>
<td>Adhipati</td>
<td>50</td>
<td>Head</td>
<td>Joint</td>
<td>Fatal</td>
<td>Torcular herophila</td>
</tr>
</tbody>
</table>

*fatal after removal of foreign body

source: Susruta Samhita (sharirasthan)- commentary by Dr. Bhashkar Govind Ghanekar

### Chart 1: Marma according to structure (No.)

<table>
<thead>
<tr>
<th>Structure</th>
<th>Mamsa</th>
<th>Siras</th>
<th>Snayu</th>
<th>Asthi</th>
<th>Sandhi</th>
</tr>
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<tbody>
<tr>
<td>Total Mamsa</td>
<td>107</td>
<td>11</td>
<td>41</td>
<td>27</td>
<td>5</td>
</tr>
<tr>
<td>Mamsa</td>
<td>5</td>
<td>10</td>
<td>41</td>
<td>27</td>
<td>5</td>
</tr>
<tr>
<td>Siras</td>
<td>11</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>0</td>
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<tr>
<td>Snayu</td>
<td>41</td>
<td>11</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Asthi</td>
<td>27</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Sandhi</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

### Chart 2: Percentage of Mamsa according to structure

- Mamsa: 50%
- Siras: 10%
- Snayu: 25%
- Asthi: 7%
- Sandhi: 19%

### Chart 3: Marma Properties (No.)

- Total Mamsa: 107
- Agnya: 19
- Vyaya: 11
- Saumya: 44
- Saumyagnaya: 33

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### Classification of Marma according to physical properties

1. **Agneya**
2. **Vayavya**
3. **Saumya**
4. **Saumyagneya**

#### Agneya- 19

<table>
<thead>
<tr>
<th>Number</th>
<th>Marma</th>
<th>Type of Marma</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Guda (1)</td>
<td>Mansa/ Dhamani marma</td>
</tr>
<tr>
<td>2.</td>
<td>Vasti(1)</td>
<td>Snayu marma</td>
</tr>
<tr>
<td>3.</td>
<td>Nabh(1)</td>
<td>Sira marma</td>
</tr>
<tr>
<td>4.</td>
<td>Hridaya(1)</td>
<td>Sira marma</td>
</tr>
<tr>
<td>5.</td>
<td>Matrika(8)</td>
<td>Sira marma</td>
</tr>
<tr>
<td>6.</td>
<td>Samkha(2)</td>
<td>Asthi marma</td>
</tr>
<tr>
<td>7.</td>
<td>Shringataka(4)</td>
<td>Sira marma</td>
</tr>
<tr>
<td>8.</td>
<td>Adhipati(1)</td>
<td>Sandhi marma</td>
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#### Vayavya- 11

<table>
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<tr>
<th>Number</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Kurcasira(4)</td>
<td>Snayu marma</td>
</tr>
<tr>
<td>2.</td>
<td>Manibandha(2)</td>
<td>Sandhi marma</td>
</tr>
<tr>
<td>3.</td>
<td>Gulpha(2)</td>
<td>Sandhi marma</td>
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<tr>
<td>4.</td>
<td>Utksepa(2)</td>
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</tr>
<tr>
<td>5.</td>
<td>Shapani(1)</td>
<td>Sira marma</td>
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#### Saumya (44)

<table>
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<td>1.</td>
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<tr>
<td>2.</td>
<td>Kurpara(2)</td>
<td>Sandhi marma</td>
</tr>
<tr>
<td>3.</td>
<td>Ani(4)</td>
<td>Snayu marma</td>
</tr>
<tr>
<td>4.</td>
<td>Urvi(4)</td>
<td>Sira marma</td>
</tr>
<tr>
<td>5.</td>
<td>Lohitaksas(4)</td>
<td>Sira marma</td>
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<tr>
<td>6.</td>
<td>Kakshadhara(2)</td>
<td>Snayu marma</td>
</tr>
<tr>
<td>7.</td>
<td>Juna(2)</td>
<td>Sandhi marma</td>
</tr>
<tr>
<td>8.</td>
<td>Vitapa(2)</td>
<td>Snayu marma</td>
</tr>
<tr>
<td>9.</td>
<td>Kakundara(2)</td>
<td>Sandhi marma</td>
</tr>
<tr>
<td>10.</td>
<td>Amsaphalaka(2)</td>
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<td>11.</td>
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<td>Snayu marma</td>
</tr>
<tr>
<td>12.</td>
<td>Nila/manya(4)</td>
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#### Saumyagneya (33)

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<td>Mansa marma</td>
</tr>
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<td>6.</td>
<td>Apalapa(2)</td>
<td>Sira marma</td>
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</tbody>
</table>
7. Apastambha(2) - Sira marma
8. Katikataruna(2) - Asthi marma
9. Nitamba(2) - Asthi marma
10. Parsvasandhi(2) - Sira marma
11. Vrihati(2) - Sira marma
12. Simanta(5) - Sandhi marma

Classification of Marma according to the structural contents:

1. Mansa Marma (11)
   Talahridaya (4)
   Indravasti (4)
   Guda (1)
   Stanarohita (2)

2. Sira Marma (41)
   Nila (2)
   Manya (2)
   Matrika (8)
   Sringataka (4)
   Apangita (2)
   Shapana (1)
   Phana (2)
   Stanamula (2)
   Aalapa (2)
   Apestambha (2)
   Hridaya (1)
   Nabhi (1)
   Parsvasandhi (2)
   Vrihati (2)
   Lokitaksa (4)
   Urvi (4)

3. Snayu Marma (27)
   Ani (4)
   Vitypa (2)
   Kakshadhar (2)
   Kurca (4)
   Kurcasir (4)
   Vasti (1)
   Kshipra (4)
   Ansa (2)
   Vidhura (2)
   Utkepa (2)

4. Asthi Marma (8)
   Katika taruna (2)
   Nitamba (2)
   Amsaphalaka (2)
   Samkha (2)

5. Sandhi Marma (20)
   Janu (2)
   Kuppara (2)
   Simanta (5)
   Adhipati (1)
   Gelpa (2)
   Manibandha (2)
   Kukundara (2)
   Averte (2)
   Kripatik (2)

Classification of Marma according to effect of Trauma :

1. Sadya Pranahara (19)
   Sringataka (4)
   Adhipati (1)
   Samkha (2)
   Kantha sira (matrika) (8)
   Guda (1)
   Hridaya (1)
   Vasti (1)
   Nabhi (1)

2. Kalantara Pranahara (33)
   Stanamula (2)
   Stanarohita (2)
   Apealapa (2)
   Apastambha (2)
   Simanta (5)
   Talahridaya (4)
   Kshipra (4)
   Indravasti (4)
   Katikataruna (2)
### Marma Science and Principles of Marma Therapy

<table>
<thead>
<tr>
<th>Category</th>
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<td><strong>4. Vaikalyakara (44)</strong></td>
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<td>Vidhura</td>
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<td>Krikatika</td>
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<td>Amsa</td>
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<td>Amsaphalaka</td>
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<td>Apanga</td>
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<td>Nila</td>
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<td>Manya</td>
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<td>Phana</td>
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<td>Avara</td>
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<td><strong>5. Rujakara (8)</strong></td>
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<td>Gulpha</td>
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<td>Manibandha</td>
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<td>Kurcasira</td>
<td>(4)</td>
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12. Astanga Hridaya
13. Astanga Sangraha
14. Ramayana by Maharashi Valmiki

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<th>No.</th>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>1.</td>
<td><em>Adhibhautik</em></td>
<td>Influences from the material world</td>
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<td><em>Adhidaivik</em></td>
<td>Influences from the astral world</td>
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<td>3.</td>
<td><em>Adhipati</em></td>
<td>Torcular herophilia</td>
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<td><em>Adhyatmic</em></td>
<td>Spiritual</td>
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<td>5.</td>
<td><em>Agniya</em></td>
<td>Pertaining to fire</td>
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<td>6.</td>
<td><em>Agnisara</em></td>
<td>Fire purification movement, a hatha yoga technique</td>
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<td>7.</td>
<td><em>Ajna chakra</em></td>
<td>Eye brow centre. 'Third eye'</td>
</tr>
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<td>8.</td>
<td><em>Anganyas</em></td>
<td>Ritual exercise, where different body parts are touched with mantras</td>
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<td>9.</td>
<td><em>Akash</em></td>
<td>Space/ ether</td>
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<td>10.</td>
<td><em>Akuncana</em></td>
<td>Spasmodic pain</td>
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<td>11.</td>
<td><em>Alpavedanam</em></td>
<td>Mild pain</td>
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<td>12.</td>
<td><em>Amsa-marma</em></td>
<td>Coraco-humoral, gleno-humoral ligament/ trapezius muscle</td>
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<td>13.</td>
<td><em>Amsaphalaka-marma</em></td>
<td>Scapular spine</td>
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<td>14.</td>
<td><em>Anahat Chakra</em></td>
<td>Psychic centre at the heart</td>
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<td>15.</td>
<td><em>Ani-marma</em></td>
<td>Tendon of biceps muscle</td>
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<td>16.</td>
<td><em>Ani-marma</em></td>
<td>Tendon of quadriceps femoris</td>
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<td>17.</td>
<td><em>Ankusika</em></td>
<td>Anchoring/ hanging pain</td>
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<td>18.</td>
<td><em>Anma</em></td>
<td>A kind of oriental medical system</td>
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<td>19.</td>
<td><em>Annadrava sula</em></td>
<td>Colic pain</td>
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<td><em>Anuloma Viloma</em></td>
<td>Respiratory practice taking Pranayama</td>
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<td><em>Pranayama</em></td>
<td>inspiration from left nostril and exhalation from right nostril and vice-verse</td>
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<td>21.</td>
<td><em>Apalapa- marma</em></td>
<td>Lateral thoracic and subcapular vessels</td>
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<td>22.</td>
<td><em>Apanga- marma</em></td>
<td>Zygomatico-temporal vessels</td>
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<td>23.</td>
<td><em>Apastambha- marma</em></td>
<td>Two bronchi</td>
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<td>24.</td>
<td><em>Ardha Matsyendrasana</em></td>
<td>Half Spinal Twist Pose</td>
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<td>25.</td>
<td><em>Ardha Padmasana</em></td>
<td>Half Lotus Posture</td>
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<td>26.</td>
<td><em>Ardita</em></td>
<td>Facial paralysis</td>
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<td>27.</td>
<td><em>Artha</em></td>
<td>Abundance, Prosperity</td>
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<tr>
<td>28.</td>
<td><em>Asana</em></td>
<td>Postures</td>
</tr>
<tr>
<td>29.</td>
<td><em>Ashwini mudra</em></td>
<td>Exercise of anus -- alternate contraction and dilation of anus</td>
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### Marma Science and Principles of Marma Therapy

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<th>No.</th>
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<td>31.</td>
<td>Asthi</td>
<td>Bones</td>
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<td>32.</td>
<td>Asthi marma</td>
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<td>33.</td>
<td>Atimatra vedana</td>
<td>Sudden excessive pain</td>
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<td>34.</td>
<td>Avabahuka</td>
<td>Frozen shoulder</td>
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<td>35.</td>
<td>Avabhanjana</td>
<td>Breaking pain</td>
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<td>36.</td>
<td>Avarta- marma</td>
<td>Junction of the frontal, molar and sphenoid bone</td>
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<td>37.</td>
<td>Avasada</td>
<td>Depression</td>
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<td>Analgesia</td>
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<td>Ayamana</td>
<td>Stretching pain</td>
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<td>40.</td>
<td>Ayurveda</td>
<td>The Science of Life. The oldest medical system in the world</td>
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<td>41.</td>
<td>Bahu</td>
<td>Arm</td>
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<td>42.</td>
<td>Bandha</td>
<td>Obliteration technique of anal verse, diaphragm and base of the neck</td>
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<td>43.</td>
<td>Bhadrasana</td>
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<td>Bhastrika</td>
<td>Type of pranayama</td>
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<td>Bheda</td>
<td>Stage of differentiation</td>
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<td>46.</td>
<td>Bhedan</td>
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<td>Bhujangasana</td>
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<td>48.</td>
<td>Bhisma pitamaha</td>
<td>Important character of Mahabharata</td>
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<td>Buddha</td>
<td>Lord Buddha</td>
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<td>50.</td>
<td>Buddhism</td>
<td>Religion based on sayings of Lord Buddha</td>
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<td>Chakra</td>
<td>Psychic centres</td>
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<td>52.</td>
<td>Chakrasana</td>
<td>Wheel Pose</td>
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<td>53.</td>
<td>Charaka samhita</td>
<td>Ayurvedic Text book written by Agnivesha and edited by Charaka</td>
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<td>Excision</td>
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<td>Chosa</td>
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<td>Cumcumayana</td>
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<td>Marmas of arteries</td>
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<td>Dhanurasana</td>
<td>Bow Pose</td>
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<td>61.</td>
<td>Dharma</td>
<td>Religion</td>
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<td>62.</td>
<td>Dhumayana</td>
<td>Sensation of contact with hot</td>
</tr>
</tbody>
</table>
63. Dhyana Mediation
64. Dukha Sorrow/unhappiness
65. Dukhatmaka Pertaining to sorrow
66. Gatranganavakirnamiva Burning sensation of the body
   pacyate
67. Gomukhasana Cow’s Head Pose
68. Guda Anal canal and anus
69. Gulpha Ankle joint
70. Halasana Plough Pose
71. Hridaya Heart
72. Indravasti-marma Origin of Palmaris Longus muscle
73. Indravasti-marma Calf muscles
74. Jala Retinaculum
75. Janu Knee joint
76. Jesus Christ Divine Master of Christianity
77. Jivatma Soul
78. Kakshadhara-marma Brachial plexus
79. Kama Desire/passion
80. Kampana Tremor
81. Kantha Neck
82. Kapha Repository for all constructive activities in a living body
83. Karatala Palm
84. Karatalapristha Palm and back of hand
85. Karanyasa Ritual exercise where hand parts are touched with mantra
86. Katikatarunamarma Sciatic notch
87. Khadau Wooden slippers
88. Krikatika-marma Atlanto-occipital articulation
89. Kriya Physical action ; particular exercises in hathayoga
90. Krostukasirsa Inflammatory knee lesion
91. Kshate ksharavasiktavacchavedana Caustic application over wound like pain
92. Kshipra-marma First inter metatarsal ligament
93. Kshipra-marma First inter metacarpal ligament
94. Kukundara-marma Sacroiliac joints
95. Kundalini jagaran Awakening the evolutionary energy in man
96. Kunjala Forced provocation of vomiting
97. **Kurca- marma**  
Tarso-metatarsal and inter tarsal ligament

98. **Kurca- marma**  
Carpo-metacarpal and inter carpal ligament

99. **Kurcasira- marma**  
Lateral ligament of the ankle joint

100. **Kurcasira- marma**  
Lateral ligaments of the wrist joint

101. **Kurpara- marma**  
Elbow joint

102. **Lohitaksa- marma**  
Axillary vessels

103. **Lohitaksa- marma**  
Iliac vessels

104. **Lord Rama**  
Prince of Ayodhya, hero of Ramayana, incarnation of Lord Vishnu

105. **Lord Krishna**  
Great yogi and spiritual incarnation of Lord Vishnu

106. **Mahabharata**  
Historic war between Kauravas and Pandavas

107. **Mahanarayan taila**  
Ayurvedic oil used for vatika disorders.

108. **Maharshi Susruta**  
Eminent scholar of Indian Surgery

109. **Makarasana**  
Crocodile Pose

110. **Mandukasana**  
Frog Pose

111. **Manibandha**  
Wrist joint

112. **Mansa**  
Muscle

113. **Mansa marma**  
Marmas of muscles

114. **Manthana**  
Gripping pain

115. **Manyasthambha**  
Torticollis

116. **Marma chikitsa**  
Marma therapy / oldest method of treatment in which vital points are stimulated

117. **Marma Shaiya**  
Plaster bed consisting of elevated impression of marma points for marma therapy of back

118. **Marma Shaiya Nirman**  
Formation of marma bed

119. **Marmachchhadana**  
Guarding of marma points prior to religious/ritual offerings

120. **Marmasthana**  
Seat of vital points in the human body

121. **Matrika**  
Blood vessels of the neck

122. **Matsyasana**  
Fish Pose

123. **Mayurasana**  
Peacock Pose

124. **Mana**  
Psyche
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<td>125.</td>
<td>Moksha</td>
<td>Liberation</td>
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<td>126.</td>
<td>Moola bandha</td>
<td>Closing exercise of the anal verse</td>
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<td>127.</td>
<td>Mri</td>
<td>Root word of marma</td>
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<td>128.</td>
<td>Mudra</td>
<td>Particular position of particular limb which has special Significance / effect</td>
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<td>129.</td>
<td>Muladhara chakra</td>
<td>The basal psychic centre</td>
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<td>130.</td>
<td>Nabhi</td>
<td>Umblicus</td>
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<td>131.</td>
<td>Nadi vaidyas</td>
<td>Therapists dealing with the nerves</td>
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<td>Nadi Shodhana</td>
<td>A kind of pranayama</td>
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<td>133.</td>
<td>Namaz</td>
<td>Prayer of Muslims</td>
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<td>134.</td>
<td>Nauli</td>
<td>Type of sadakarmas in which the movements of abdominal muscles are visible.</td>
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<td>135.</td>
<td>Nila/manya</td>
<td>Right and left common carotid artery or RF</td>
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<td>Nirdahana</td>
<td>Burning pain</td>
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<td>137.</td>
<td>Nitamba-marma</td>
<td>I施策ial Tuberosity</td>
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<td>Osa</td>
<td>Burning pain</td>
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<td>139.</td>
<td>Padadaha</td>
<td>Burning foot syndrome</td>
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<td>Padaharsa</td>
<td>Tingling sensation of foot</td>
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<td>141.</td>
<td>Padmasana</td>
<td>Lotus Pose</td>
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<td>142.</td>
<td>Pattika sula</td>
<td>Pain caused by pitta</td>
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<td>143.</td>
<td>Panchabhautika</td>
<td>Made up of five basic elements</td>
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<td>144.</td>
<td>Panchakarma</td>
<td>Five therapies for purification of body</td>
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<tr>
<td>145.</td>
<td>Panchamahabhutas</td>
<td>Five basic elements constituting the Universe</td>
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<td>147.</td>
<td>Parsvasandhi-marma</td>
<td>Common iliac vessels/ renal angles</td>
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<td>148.</td>
<td>Parvasubheda</td>
<td>Joints pain</td>
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<td>149.</td>
<td>Pattika Vedana</td>
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<td>150.</td>
<td>Pavanamuktasana</td>
<td>Wind-Releasing Pose</td>
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<td>Phana-marma</td>
<td>Kiesselbach’s plexus in Little’s area/ olfactory region of the nose</td>
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<td>152.</td>
<td>Pida</td>
<td>Pain</td>
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<td>153.</td>
<td>Pitta</td>
<td>Responsible for all bio-chemical activities of the living body</td>
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<td>154.</td>
<td>Poorva-karma</td>
<td>Pre-operative measures</td>
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<td>155.</td>
<td>Prakopa</td>
<td>Stage of proliferation</td>
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<td>156.</td>
<td>Pranayama</td>
<td>A part of yogic breathing practices</td>
</tr>
</tbody>
</table>
Marma Science and Principles of Marma Therapy

157. Prasara  Stage of spread
158. Prishta  Back
159. Prithivi  Earth
160. Purana  Distending pain
161. Ravana  King of Lanka in the epic Ramayana

162. Rudrabhisheka  Ritual offering to Lord Shiva
163. Ruja  Pain
164. Ruk  Pain
165. Sadana  Body ache
166. Sadakriyas  Six yogic procedures of body purification

167. Samcaya  Stage of accumulation
168. Samkha  Conch
169. Samkha-marma  Temples
170. Samadhi  The highest state of consciousness
171. Sandhi  Joints
172. Sandhi marma  Marmas of joints
173. Sandhya  A certain time of prayer
174. Sannipataja Vedana  Disorder caused by three dosas collectively

175. Sarva vedana  Different kinds of pain
176. Sarvanga abhyanga  Body massage
177. Sarvangasana  Shoulder Stand Pose
178. Satya guna  Quality of light, purity and goodness

179. Satsanga  Religious celebration
180. Saumya  Pertaining to Kapha
181. Saumyagneya  Pertaining to Kapha-pitta
182. Sharīra  Body
183. Shatasakara churn  An Ayurvedic medicine used for constipation

184. Shavasana  Relaxation Pose
185. Simanta  Cranial sutures / Sutures
186. Sīra  Blood vessels
187. Sīra marma  Marmas of blood vessels
188. Sīra  Head
189. Snayu marma  Marmas of ligaments/tendon
190. Snayu  Ligament and tendons
191. Soma  Moon
192. Sphotana  Bursting pain
193. Srinagata-marma  Cavernous and inter-cavernous sinuses
194. Stambhana  Stiffness/ ankylosing pain
195. Stana mula  Internal mammary vessels
196. Stana rohita  Lower part of pectoralis major muscle
197. Sthana samsraya  Stage of localization
198. Sthapani-marma  Nasal arch of the frontal vein
199. Sukhasana  Simple Cross-legged Posture
200. Sukhatamaka  Feeling of well being
201. Sula  Abdominal colic
202. Supta vajrasana  Lying Thunderbolt Pose
203. Suptatvama  Numbness
204. Surya  Sun
205. Surya-namaskara  An important yogic exercise comprising ten different positions
206. Susruta Samhita  Oldest text of Indian surgery
207. Swapana/ swapa  Anaesthesia
208. Todana  Pain due to blunt injury
209. Talahridaya-marma  Long planter ligament
210. Talahridaya-marma  Palmer aponeurosis
211. Tama  Darkness
212. Teja  Light
213. Tilaka  Ritual application of color on forehead between eyebrows
214. Todana  Pricking pain
215. Tridosaja  Caused by vata, pitta and kapha
216. Tsubo  Vital points described in acupressure
217. Uddiyana bandha  The drawing-in of the diaphragm
218. Urvi-marma  Brachial artery/ Bacilic vein
219. Urvi-marma  Femoral vessels
220. Usmabhivriddhi  Increased temperature
221. Utkshepa  Temporal muscle and fascia
222. Utpatana  Tearing pain
223. Vagabhatta  Renowned Ayurvedic scholar
224. Vaidyas  Ayurvedic physician
225. Vajrasana  Thunderbolt Pose
226. Vasti-marma  Urinary bladder
227. Vasti-chikitsa  Enema
228. Vata  Responsible for all sensory and
229. *Vatanashaka taila*  
**Oil used for the diseases caused by vata**

230. *Vastradhauti*  
**Type of sadakarma where rolled cotton cloth is swallowed**

231. *Vayavya*  
**Pertaining to Vayu**

232. *Vayu*  
**Air**

233. *Vedana*  
**Sudden excessive pain**

234. *Vedanasthapana*  
**Pain killers/ Analgesics**

235. *Vedic*  
**Related to Vedas**

236. *Vedic era*  
**The time period of Vedas**

237. *Vidarana*  
**Perforating pain**

238. *Vidhura-marma*  
**Posterior auricular ligament/ vessels**

239. *Vikirana*  
**Radiating pain**

240. *Viksepana*  
**Pulling pain**

241. *Visharada*  
**Super specialist**

242. *Vislesana*  
**Dislocating pain**

243. *Visvaci*  
**Radicular neuritis or paralysis**

244. *Vitapa-marma*  
**Inguinal ligament/ inguinal canal**

245. *Vividha shoola/ vedana*  
**Different pain**

246. *Vrihati-marma*  
**Subscapular and Transverse cervical arteries**

247. *Vyakta*  
**Stage of manifestation**

248. *Yoga*  
**Union**

249. *Yogasanas*  
**Yogic Postures**