

A Literary Review of Marma Chikitsa in The Management of Shushkakshipaka (Dry Eye Syndrome)

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Abstract—Marma Chikitsa, an ancient Ayurveda therapeutic modality, targets specific vital points (Marmas) on the body to restore balance and alleviate various health conditions. Different types of muscles, veins, bones, ligaments and joints meet with each other at the Marma point thus these points acts as a physiological junction. Knowledge of Marma and Marma Chikitsa will be beneficial in maintenance of health and pre-vention from diseases. Marma Chikitsa is an instant, permanent, natural and non-invasive way of healing in present scenario. Marma Chikitsa had emerged as new dimensions in non- pharmacological treatment of Ayurveda. This literary review aims to evaluate the efficacy of Marma Chikitsa in managing Shushkakshipaka (Dry Eye Syndrome). Recent studies indicate that Marma Chikitsa can significantly reduce symptoms of Shushkakshipaka (Dry Eye Syndrome). These findings suggest that Marma Chikitsa offers a non invasive, holistic approach to managing Shushkakshipaka (Dry Eye Syndrome), potentially serving as a complementary therapy alongside conventional treatment. This study aims to provide a comprehensive overview of Marmas, offering a general description and highlighting the utility of Marma Chikitsa in promoting overall well-being.

Index Terms—Ayurveda, vital points, Marma, Shushkakshipaka (Dry Eye Syndrome), Marma Chikitsa

I. INTRODUCTION

Eye sight is the God's greatest gift to mankind, the blessing that allows us to see our surroundings and feel the beauty of God's creation. Amongst all the sense organs, the eyes are considered to be important because vision is crucial for social and intellectual development of a person. It is rightly quoted by Acharya Vagbhata, stating the importance of eyes, "Once the vision is lost, the different kind of things of

the world will all become one kind only that of darkness."¹

Certain eye diseases may not be life threatening but it may affect their quality of life. It can disturb their routine work and if not treated on time, it may lead to blindness, Dry Eye Syndrome is one of them affecting the whole eye.

II. AIM AND OBJECTIVE

- To understand importance of Marma Chikitsa in detail by review of Ayurveda literature.
- To understand their efficacy of Marma Chikitsa in the management of Shushkakshipaka (Dry Eye Syndrome) by review of Ayurveda Literature.

III. MATERIAL AND METHOD

- Review of Ayurveda literature including relevant commentaries.
- Other print media, online information, journals, books, magazines etc.

IV. REVIEW OF LITERATURE

Review Of Shushkakshipaka (Dry Eye Syndrome): Acharya Sushruta has mentioned 76 Netragata Roga in the Uttartantra². Sushkakshipaka is one of them. Shushkakshipaka is described under Sarvagata Netra Rogas in Sushruta Samhita Uttartantra 6th chapter³ and by Acharya Vagbhata in Uttartantra 15th chapter under Sarvakshiroga . Shushkakshipaka mentioned in Sushruta Samhita seems to be its early stage but description of Acharya Vagbhata is that of well-established advanced disease state with preponderance of Paka (i.e. inflammation).

The disease is characterized by features such as Kūṇita Vartma (inability to close the lids), Daruṇa and Ruksa Vartma (hard & rough lids), Avila Darshana (blurring of vision) and Daruṇa Pratibodhana (difficulty in opening the lids)⁴. Acharya Vagbhata mentioned additional features such as Gharsha (foreign body sensation), Toda (pricking pain), Bheda (tearing pain), Upadeha (stickiness of lids), Rukshatwa and Daruṇatwa of Vartma and Akshi (hardness and roughness of the eyelids and eye), Krichronmeelan (difficulty in blinking), Sheetecca (desire for cold), Shula (Pain) and Paka (Inflammation)⁵. All the symptoms are mainly related to vitiation of Vata and Pitta Doshas which traverse to the eyes by Siras and get accumulated in eye to manifest the disease Shushkakshipaka. All these symptoms are described by contemporary science in dry eye syndrome.

Dry eye is a multifactorial disease of the tears and ocular surface that results in symptoms of discomfort, visual disturbance and tear film instability with potential damage to the ocular surface. It is accompanied by hyperosmolarity of the tear film and inflammation of the ocular surface⁶. Tear film is approximately 2 to 5 μm thick over the cornea and is composed of three main components.⁷ These 3 components are lipid, aqueous, and mucin layer. The most superficial layer, the lipid layer, is produced by the meibomian glands of the eyelids and functions to reduce the evaporation of tears. The middle aqueous layer is the thickest component of the tear film and is produced by the lacrimal glands, located in the orbits and the accessory lacrimal glands (glands of Krause and Wolfring) in the conjunctiva. The basal layer is composed of mucins or glycoproteins and is predominantly produced by conjunctival goblet cells. Mucins enhance the spread of the tear film over the corneal epithelium through the regulation of surface tension. It converts the hydrophobic corneal surface into hydrophilic one.

V. REVIEW OF MARMA CHIKITSA

Definitions of Marma: -

1. According to Acharya Sushruta:

ekZf.k uke ekalfjkluk; ~ofLFk lfU/klfUuikrk%;
rs"qk LoHkkor, o fo'ks"ks.k izk.kfLr"BfUr;
rLekUreeZLofHkgrkLrkaLrku~ Hkkokuki|UrsAA
(lq0" kk0 6@22)

Marma (vital spots) are confluence of Mamsa, Sira, Snayu, Asthi and Sandhi. These are the places where Prana (vital life force) resides naturally.⁸

2. According to Acharya Charaka

Acharya Charaka describes Marma as site of Chetana and intensity of pain will be more compared to other parts of body if trauma or disease occurs. Acharya Charaka describes Marma as the centres of Chaithanya. So Peeda in Marma sthana (functional abnormality) of these centers will be more severe when compared to other parts.

3. According to Acharya Vagbhata

Acharya Vagbhata says that, these are the points which are painful on application of pressure and abnormal pulsation. Marmas are the areas where Dhamani come together along with other structures - Mamsa, Sira, Snayu, Asthi and Sandhi. In Ashtanga Hridaya and Astanga Sangraha it is mentioned in Shareerasthana Vagbhata tells that wherever irregular pulsation and pain felt on pressure or trauma that location can be called as Marma. Marma is an indication of the underlying pathophysiological changes as a result of trauma.

4. According to Acharya Dalhana

Acharya Dalhana has defined the Marma, as the points on our body surface, where any form of trauma or injury, results in sudden death.

5. According to Acharya Arunadatta

Acharya Arunadatta says that these are the vital points on which injury lead to Marana or Maranasadrishya Dukha. Marma is the site of Prana which is constituted by confluence of Sira, Snayu, Asthi and Sandhi.

6. According to Acharya Narahari

Acharya Narahari the author of Raja Nighantu explains the Marma as the site of life - Jeevasthanam, which also indicates its association with Chaithanya.

7. According to Acharya Bhavprakasha

Acharya Bhavprakasha also says that Marma is the meeting point of Mamsa, Sira, Snayu, Sandhi and Asthi, where Prana resides.

8. In Veda

The first references to Marma in the Rig Veda speak of using Varma or protective coverings to protect

these, Marmas. It refers to prayer or Mantra (Brahman) as the best protection (Varma) for these Marmas, showing a spiritual view behind the use of Marmas from the very beginning.[7] Originally Marma was part of Vedic martial arts or Dhanur Veda, which is one of the four Upavedas or secondary Vedas.[8] First time, the term Marma is described in Atharvaveda. During the Vedic period, knowledge of Marma was known by kings and warriors.

9. In Mahabharata we find many references for Marma or Varman. It is interesting that there are references of protective clothing's of the Marmas of the elephants and horses also.

10. In Ramayana subject Marma has been mentioned in epics too e.g. Ramayana. An incident of injury to the vital part of the Ravana by the lord Rama is mentioned in by Sri Goswami Tulshidasji in Ramayan. Syncope of Laxman, younger brother of Lord Ram, on the battle field is worth remembering. 11. Arthashastra of Kautilya

It mentioned the use of arrowheads made up of metal and some protective instruments against the injury to Marmas. The instructions are available regarding Marma to the Victorian persons. The kings of that time asked to keep their vital parts protected with 'Kavacha', a kind of protector.

Urdhwajatrugata Marma: -

t=q.k Å/osZ prL=ks /keU;ks-"VkS ekr`dk} s d`dkfVds} s fo/kqjs} s Q. ks }koikM~xkSa} kokorkSZ }koqR{ksikS} kS 'ka[kkosdk LFKiuh iap lheUrkJ~PkRokfj 'k`axkVdkU;sdks:f/kifrfjfrAA (lq0" kk0 6@6)

There is four Dhamani, eight Matrika, two Krikatika, two Vidhura, two Phana, two Apanga, two Avarta, two Utkshepa, two Shankha, one Sthapani, five Simanta, four Shringataka and one Adhipati Marma.⁹ All are situated within Urdhwajatrugata part.

Ayurveda is a very effective ancient system of medicine with its effective therapies like Panchkarma, Ahara Chikitsa, Yoga and many others. One of such hidden assets is Marma Chikitsa which is developing and gaining importance now a day. It is based on the utilization of 107 Marma points in the body which are considered to be access points of body, mind and consciousness. Manipulating or stimulating these Marma points in the management of diseases is called

Marma Chikitsa. Through stimulation of Marma points by various means and methods, the Prana (vital energy) existing in it, may be directed to remove blockages and stimulate energy flow; thus, resulting in a state of healthy body, mind and spirit. Marma Chikitsa involves pressing Marma points which causes release of blockage of energy, removes excess Ama, facilitates easy flow of energy, nourishes the tissues and improves blood circulation.

Among the various Marma points, Urdhwajatrugata Marmas especially Apanga, Avarta and Shringataka Marmas hold particular significance in addressing Shushkakshipaka. Apanga and Avarta Marma, are among the Vaikalyakara Marmas, present in the head region (Urdhwajatrugata Sthana). If these Marmas get injured then they cause diminished vision or partial loss of vision (Drishtimandya) and blindness (Andhya).¹⁰ But if they treated carefully, these can cure diseases like xerosis, myopia and Dry Eye Syndrome (Sushkakshipaka).

Apanga Marma¹¹: -

Classification: -

1. It's a Vaiklyakara type of Marma -Vaikalyakara Marma has Soma Guna property. Due to its Soma property, it possesses Sthira (firm) and Shaitya (cold) characteristics and sustains life. Acharya Sushruta has described the Klesha (distress) and Ruja (pain) as a result of injury near Vaikalyakara Marma after a certain period.
2. Counted among Urdhwajatrugata Marma
3. It is a Sira Marma according to Rachana.
4. ½ Angula Pramana Marma according to Pramana
5. These are two in number

Location- Apanga Marma is situated at the outer side of the orbits, below the lateral end of the eyebrows, just lateral to the orbital cavity and close to the zygomatic process.

Structures related to Apanga Marma are as follows:

1. Optic nerve, Ophthalmic nerve, Trochlear nerve, Abducens nerve, Oculomotor nerve
2. Ophthalmic artery
3. Zygomatic temporal vessels
4. Zygomatic facial vessels i.e. short & long posterior ciliary and anterior ciliary arteries and veins.
5. Other structures are ciliary nerve, lacrimal nerve, sphenoid, maxillary and zygomatic joint. Effect of

injury to this Marma points leads to either blindness or partial loss of vision.

Avarta Marma¹²:-

Classification: -

1. Vaikalyakara Marma
2. Urdhvajatrugata Marma
3. It is a Sandhi Marma according to Rachana.
4. ½ Angula Pramana Marma
5. Two in number
6. Situation- Avarta Marma is situated above the eyebrows on both sides. We can find a small depression above the eyebrow.

Structures related to Avarta Marma are as follows:

1. Junction of frontal, zygomatic & sphenoid bone, frontal lobe of cerebrum.
2. Optic nerve
3. Supraorbital nerves
4. Ophthalmic and supraorbital arteries
5. Levator superior and superior rectus muscle
6. Superior ophthalmic vein.

Shringataka Marma¹³

Classification: -

1. Sadyopranahara marma
2. Urdhvajatrugata Marma
3. It is a Sira Marma according to Rachana.
4. Four Angula Pramana Marma
5. Four in number
6. Situation- Shringataka Marma is situated within the confluence of Sira; nourishing the Ghrana(nose), Shrotra (ear), Akshi(eye) & Jivha (tongue).

Structures related to Shringataka Marma are as follows

1. Dural Venous Sinuses
2. Cavernous sinus
3. Intercavernous sinuses
4. Pterygoid venous plexus
5. Internal Carotid Artery
6. The trigeminal nerve- maxillary branch

VI. MODE OF ACTION OF MARMA CHIKITSA

Marmas are centres for the vital-force or Prana, the master power behind both physical and psychological processes. ▪ Marma points may be regarded as special Pranic switches in the body, which when properly stimulated, can lead to the proper flow of Prana in

different body parts, resulting in the desired therapeutic benefits Prana can be guided to clear obstructions, enhance energy flow, access latent energy stores, and establish links with the higher forces of nature and life by manipulating Marmas. Mamsa, Sira, Snayu, Asthi and Sandhi are the Sthan used for Marma Chikitsa performed. Marma points also help to balance Tridoshas and Trigunas since it involves various Pranas like Vayu, Sattva, Agni, Rajas and Atma. Marma is related to the Prana which associated with Vata Dosha therefore Marma mainly deals with Vata Dosha. Different Marma points are considered for Vata Vyadhi depending upon involvement of Vata such as Prana Vata, Udana Vata. Vyana Vata, Samana Vata and Apana Vata. Marma Chikitsa not only helps in Vata Vyadhi but also helps to clear the channels and improve circulation of body. It develops physical and mental flexibility, removes ama and clinically applied for many diseases specially heart problem. Marma Chikitsa provide stimulation of vital point and thus removes blockages from the Shrotas and offer physical and psychological repose. Through using Marmas, we can restore the proper connection between the subtle body (our internal energy, moods and emotions) and the physical body (our material condition), resulting in increased health and vitality on both levels. Stimulation of Marma points optimizes Prana Vayu and maintains equilibrium of Doshas. It creates equilibrium between all vital energies, removes emotional and physical toughness, removes toxins from the body and improves digestion, balances body temperature, provides positive energy, and provides relief from stress, depression, anger, and other mental problems. Instant pain relief is the motive of Marma Chikitsa. Stimulation of Marma can produce analgesia by secreting a number of prostaglandin inhibitors, endorphins, enterferon and other opoid like substances which are hundreds of times more potent than opium.

VII. DISCUSSION

In India, limited epidemiological data is available on dry eye syndrome. Recently a study from north India reported 32% prevalence of dry eye syndrome there. Out of them 81% were having severe dry eye syndrome based on symptoms. Another study from south India reported 1.46% Dry eye syndrome incidences. The authors predicted that within the end

of next decade, large number of urban and rural populations would have dry eye syndrome.¹⁴

Dry eye syndrome is a spectrum of disorders ranging from mild eye strain to foreign-body sensation, pain, burning and sight-threatening complications. Patients suffer considerable discomfort due to it, which interfere with daily routine activities. The symptoms of dry eye syndrome aggravate in conditions with pollution and humidity such as in air conditioning and indoor heaters. Unfortunately, despite of much research undertaken on dry eye syndrome, permanent cure for dry eyes is still not available.

Dry eye syndrome is more common among women than men. Many factors such as poor nutrition, prolonged screen time etc. results in dry eye. Vitamin A deficiency in children due to diseases like measles, respiratory tract infection etc. also results in dry eye.

Tear substitutes are the only affordable treatment modality with modern medical science. The duration of action of these tear substitutes is variable and are advised as per the need, only providing symptomatic relief. The preservatives present in these formulations are also a cause of dry eye, whereas those available without preservatives are not cost-effective.

As per Ayurveda, each patient of dry eye needs a different approach as the etiology and pathology are variable. Vata-Pitta vitiation in Shushkakshipaka is the basic pathology due to disturbed system biology which needs a holistic approach like Marma Chikitsa to deal with the problem.

VIII. CONCLUSION

Marmas are vital points, centres for the Prana. Marma Chikitsa is a natural, non-invasive, instant and permanent method of healing. The purpose of a Marma Chikitsa is to stimulate the various bodily organs and systems It can be used anywhere, at any time, and without the need for medication. Marma knowledge is extensively well known since Vedic period. Later, its progression can be seen in Samhitha Kala through the texts emerged during that period like Susrutha Samhitha. They can be used specifically for the diagnosis and treatment of disease or generally for promoting health and longevity. Marmas are integral to all Ayurvedic therapies from simple self-treatments to complex clinical procedures. This paper tried to obtain all the information's related to Marma and

Marma Chikitsa from classics and highlight its benefits from Ayurvedic point of view.

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