

ANATOMICAL REVIEW OF ADHOSHAKHAGAT MARMA WITH SPECIAL  
CONSIDERATION TO CLINICAL ASPECT OF VITAPA MARMADr. Deepak Sharma<sup>1\*</sup>, Dr. Vikash Bhatnagar<sup>2</sup>, Dr. Sandeep M Lahange<sup>3</sup>, Dr. Rekha Sharma<sup>4</sup> and Dr. Neha Kumawat<sup>5</sup><sup>1</sup>MD Scholar Department of Sharir Rachana, National Institute of Ayurveda, Jaipur.<sup>2</sup>Associate Professor Department of Sharir Rachana, National Institute of Ayurveda, Jaipur.<sup>3</sup>Associate Professor Department of Sharir Rachana, National Institute of Ayurveda, Jaipur.<sup>4</sup>Medical Officer Department of ISM Union Territory of Jammu and Kashmir.<sup>5</sup>MD Scholar Department of Sharir Rachana, National Institute of Ayurveda, Jaipur.

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Article Received on 08/02/2021

Article Revised on 28/02/2021

Article Accepted on 19/03/2021

## ABSTRACT

Ayurveda is a science which deals with the science of life. It treats the diseases and maintains the health of the healthy person also. Marma science is science which has been gifted by the Acharays. Marma are vital point on body surface having importance regarding traumatic effects where a minor injury can lead to disability, dysfunctioning or even termination of life. Acharya Sushruta has described every aspect of Marma like definition, signs, symptoms of Marma injury. The details of Marma are explained in the 6th chapter of Sushruta Sharirasthan and Vitapa is mentioned under Adhoshakhagata marma in category of Vaikalyakara Marma. In this article an attempt is being made to simplify the concept of Vitapa as a Marma with the help of modern anatomy particularly in males.

INTRODUCTION<sup>[1]</sup>

Marma are the vital points on the body which are very significant in sustaining the life. These were firstly described in Vedic era's. The Marma concept was firstly elaborated by Acharya Charak but Acharya Sushruta & Acharya Vagbhata have described them in detail in their respective Samhitas. In dictionaries, the word Marma means "Marman" i.e., mortal point, sensitive point, weak vulnerable point. In Earlier era, this science of Marma was more developed in wars where warriors used to achieve their target point for destroying mortal points, i.e. Marma of enemies. To explore the knowledge of Marma in clinical fields, it is necessary to know the actual structures present at those sites. Although the detailed understanding of these Marma in ancient science was evident, but there were no sufficient techniques to find out their original structural aspect involved.

Acharya Dalhan have described the Marma as "Maryanti iti Marmani" i.e it is point on the body surface where if any injury or trauma occur, causes sudden death.<sup>[1]</sup> So they should be protected from any type of injury. Arundatta says that these are the vital points on which injury lead to Marana or Maranasagrishya Dukh (death).<sup>[2]</sup> Marma is the seat of Prana (life) which is constituted by confluence of Mansa (muscle), Sira (vein), Snayu (ligament), Asthi (bone) & Sandhi (joint).<sup>[3]</sup> Acharya Vagbhata says that, these are the points which are painful on application of pressure & shows abnormal

pulsation.<sup>[4]</sup> Total number of Marma described in Samhitas are 107.<sup>[5]</sup> Description of 107 Marma given in Samhita is being classified into 5 types on the basis of structural involvement<sup>[6]</sup> which are as

- Mansa Marma (muscular vital point)
- Sira Marma (vascular vital point)
- Snayu Marma (ligament vital point)
- Asthi Marma (vital point of bone)
- Sandhi Marma (vital energy points of joint).

Another classification of Marma is on the basis of after-effect of injury to Marma<sup>[7]</sup> these are as follows

- Sadhya Pranhar Marma (causing sudden death)
- Kalantar Pranhar Marma (death after some time)
- Vishlyaghna Marma (type of Parinam)
- Vaikalyakara Marma (causing deformity)
- Rujakar Marma (causing pain)

In each both lower limb there is pair of 11 Marma these are Kshipra, Tala-Hridaya, Kurcha, Kurcha - Shir, Gulpha, Indrabasti, Janu, Ani, Urvi, Lohitaksha & Vitapa. Out of these in each lower limb 6 Vaikalyakara Marmas are present, they are Kurch, Janu, Ani, Urvi, Lohitaksha, & Vitapa.<sup>[8]</sup> Vitapa Marma is considered as Vaikalyakara Marma where any type of trauma or injury leads to structural & functional deformity.

### AIM AND OBJECTIVES OF THE STUDY

- To determine the location of *Vitapa Marma*
- To find out the structural constitution of *Vitapa Marma*
- To find out the effect of some trauma on *Vitapa Marma*

### MATERIAL AND METHODS

- Various published articles, texts and data available on internet as well as literature on *Marma Sharir* have been reviewed and data has been collected.
- Modern literature on Human Anatomy has been reviewed and collected.

### Review of *Vitapa Marma*<sup>[9]</sup>

*Marma* are the fundamental spots in human body, any injury to them will cause the various symptoms like pain, blood loss, deformity etc. They are 107 in number and classified according to their structure, region, *pariman* (measurement) and *parinam* (injury effect). *Acharaya Sushruta* in *Sharira sthan* of *Sushruta samhita* mentioned the position of *Vitapa Marma* in between *Vankshana* (hip joint region) and *Vrishan pradesh* (testicular region) and is *snayu, vaikalyakara* and 1 *anguli* in *praman*.

In modern anatomy the site and location of this *marma* can be compared to the area of inguinal canal in which the main content is Spermatic cord. This canal is an oblique passage in the lower part of the anterior abdominal wall, situated just above the medial half of the inguinal ligament. It is about 4 cm (1.5 inches) long and is directed downwards, forwards and medially. The inguinal canal extends from deep inguinal ring to the superficial inguinal ring. The deep inguinal ring is the oval opening in the fascia transversalis, situated 1.2 cm above the midinguinal point and immediately lateral to the stem of the inferior epigastric artery. The superficial inguinal ring is a triangular gap in the external oblique aponeurosis. It is shaped like an obtuse angled triangle. The base of the triangle is formed by the pubic crest. The two sides of the triangle lateral or lower and medial or upper margins of the openings. It is 2.5 cm long and 1.2 cm broad at the base. The margins are referred as *crura*. At and beyond the apex of the triangle the two *crura* are united by intracutaneous fibres. The main structure passing through inguinal canal in males is Spermatic cord.<sup>[10]</sup>

Main Constituents of the spermatic cord

- Ductus deferens
- Testicular and cremasteric arteries and artery of the ductus deferens
- Pampiniform plexus of veins
- Lymph vessels from the testis

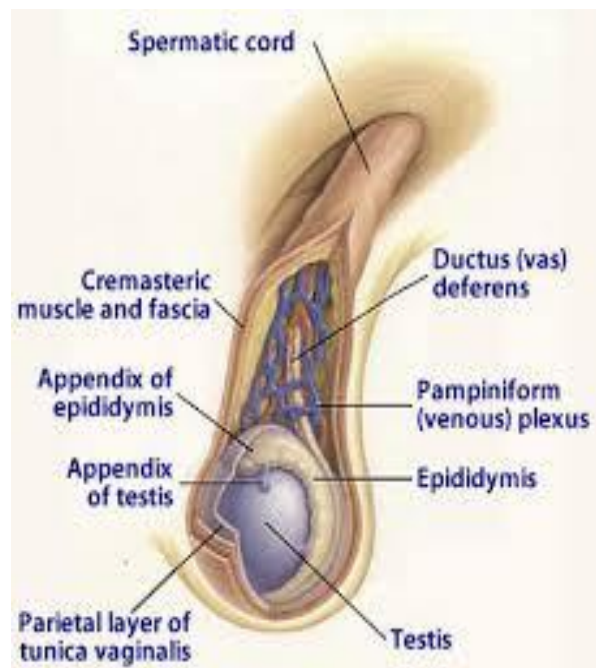


Diagram 1:- Contents of Spermatic cord.

Above details confirms the site of *Vitapa marma* is at inguinal region and the main underlying structure is spermatic cord with its constituents in case of males. Because of the damage to both the spermatic cord (Ductus Deferens is the main structure in this case), the seminal fluid will not go to its final destination. So, this will produce the infertility or sterility. In case of injury to one of the spermatic cord, will leads to functioning of only one ductus deferens. So, this will produce less quantity of semen. Thus, it justifies the *vidhya laxanas* given by *Sushrutacharya* as per the descriptions of symptoms mentioned in modern anatomy.

### CONCLUSION

The word '*Vaikalyakara*' is derived from '*Vaikalya*' means abnormality or deformity that leads to disability of something. *Vitapa Marma* mentioned by *Acharya* in their *Samhita* is the positioned in between the joining area of *Vankshan* and *Vrishan*. In males, injury on *Vitapa Marma* leads to *Shandhata* (sterility) or *Alpasukrata* (oligospermia). The Cremasteric artery is the branch of inferior epigastric artery, which supplies blood to cremasteric muscle and covering of spermatic cord. The function of pampiniform plexus is venous return from testis, which helps to regulate the temperature of testis. These both were essential for sperm formation. If we assume the area of *Vitapa Marma* as mentioned by *Acharya* i.e. joining area of *Vankshan* and *Vrishana*, it is area of spermatic cord as per traumatic effect i.e. *Shandhata* (sterility) or *Alpasukrata* (oligospermia). Any type of injury that causes inflammation of cord also causes sperm flow obstruction. Vas deferens injury during herniorrhaphy or during hernioplasty also leads to its obstruction and thus sterility due to trauma at *Vitapa Marma*.

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