



An applied Aspect of *Vitap Marma* w.s.r. to Vasectomy

Mohd Ashraf Khan^{1*}, Pradeep Kumar Pal¹, H. H. Awasthi²

¹ Senior Resident & Ph.D. Scholar, Dept. of Rachana Sharir, Faculty of Ayurveda, I.M.S., B.H.U., Varanasi, U.P., India.

² Professor & Former Head, Dept. of Rachana Sharir, Faculty of Ayurveda, I.M.S., B.H.U., Varanasi, U.P., India.

ABSTRACT

The word *Marma* is of Sanskrit origin *Mrin Maranae*. The Sanskrit phrase —*Mriyatae asmin iti Marma* means there is possibility of death or serious damage to health when these points are injured. *Marma* in Sanskrit also means hidden or secret. *Marma* (vital point) is actually the seat of *Prana* (life). As *Acharya Sushruta* has stated that *Marma* points are the juncture on the body where two or more types of tissue meet, such as *Mamsa* (muscles), *Sira* (veins, arteries), *Snayu* (ligaments), *Asthi* (bones), and *Sandhi* (joints). These are mostly accepted as 107 points that are present in anterior and posterior aspects of body. In other sense *Marma* means mortal points, sensitive points, and weak vulnerable points. The word '*Vitap*' is formed from '*VitamVistaramvaPaatiPibati*' or '*Vetati-Shabdayateti*'. Its meaning is branch of tree or bush or new seed or covering of seestis. The *Vitap Marma* is described under *Snayu Marma* by *Acharya Sushruta* and *Sira Marma* by *Acharya Vagbhata* with dimension of 01 *Angula*. The traumatic effect that occurs is infertility or deformities in spermatogenesis and oogenesis. So, this *Marma* site can be used for vasectomy which is highly effective and safe for family planning. The main aim & objective of this paper is to explore a scientific & therapeutic guideline of *Vitap Marma* & to create a better understanding of *Vitap Marma* among students, health care providers & consumers.

Key Words: *Vitap*, vasectomy, spermatic cord, inguinal canal, family planning

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INTRODUCTION

The term *Marma* literary communicates the sense of vital parts of the body. Injuries or mechanical involvements directly affecting the sites of *Marmas* are likely to take away the life of the person concerned or to make him functionless. The knowledge pertaining to locations and sites of *Marmas* in the body finds better scope in the traumatic injury which is encountered in road side accident or when enemies counteract each other [1]. The people or soldiers when get injured or wounded, require major part of surgical interference where extreme care is needed, if certain vital parts of *Marma* are involved. The knowledge of surgery forms its basis through thorough human dissection. *Acharya Sushruta* was pioneer in this field [2]. A detailed dissection of human body with a view to develop a sound knowledge of the underneath

structure, organs etc. leads perfection in anatomy which subsequently develops its better application, during these courses of surgical interference, particularly when it is situated at some vital area or *Marma* of the body.

The knowledge of regional anatomy finds its better scope in management of the injuries involving the *Marmas* or the vital parts of the body. The surgeons have to take care of the vital structures like nerves, arteries and tendons etc. A thorough knowledge of *Marmas* popularized the excellence of Indian surgeons in the field of surgery [3]. So, *Marmasthana* implies the place of vital importance in the body, which when injured results to death sooner or later or serious consequences [4].

In *Ayurveda* the *Marma* has been considered as a very delicate part, having agglomeration of number of tissues and other body structures accounted to be vital point in the human body. Any injury at these vital parts or *Marma*

Corresponding author: Mohd Ashraf Khan

Address: Senior Resident & Ph.D. Scholar, Dept. of Rachana Sharir, Faculty of Ayurveda, IMS, BHU, Varanasi, U.P., India

E-mail: ✉ ashrafk194@gmail.com

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of the body makes the organ senseless or functionless or cause deformity or severe haemorrhage or even collapse and death instantaneously or late [5].

In old days, the knowledge of the *Marma* was in practical use of the warriors during warfare, and in hunting of the wild animals, aiming at the desired sites, with arrow. This science was also in practice by the ancient person's trend in martial arts like wrestling, karate, kungfu, Judo, etc [6]. But today, with the immense advancement in modern medical science, these *Marma* points are also been taken as *Jivantiti Marmani* i.e. therapeutic application at *Marma* points can provide life. This will draw a new dimension in the health care system. *Prana* resides in these *Marma* points and positive and negative energies flow in the body [7]. So these *Marma* alarming points communicate the information about the vital sites, when pressure is applied over these points.

The human body consists of an intricate network of channels, organs, circuits and tissues on many levels from the blood to the most refined nerve tissue of the brain. These interrelated channels create various patterns, linkage and interchanges across which substances, energy and information continually travel and circulate creating the mosaic of system that makes up who we are.

The total of 107 *Marma* points in the body is broadly classified into two categories as lethal or as therapeutic regions. Lethal *Marma* points are areas which if struck or injured threaten the life of a person. Therapeutic regions are sensitive points that can be used to direct energy and counter diseases. Lethal areas therefore are more important for the martial arts, while therapeutic points are more significant for medical purposes [8].

Among these vital areas one is the position of *Vitap Marma*. It lies in between the *Vankshana* (groin) and the *Vrishana* (testes) and an injury to it gives rise to impotency or oligospermia [9]. It is a *Snayu Marma* in nature [10], *Vaikalyakar* in consequences and covers the area of one *Angula* [11]. According to *Vagbhatta* it is a *Sira Marma* [12].

Anatomical structures related to Vitap Marma

Dr. Ghanekar interpreted *Vitap marma* at the site of inguinal canal and its content i.e spermatic cord. The injury in this region may produce obstructive pathology in vasdeferens or the vascular damage may cause indirect effect in entire reproductive scenario; the ultimate result is the sterility of infertility [13].

According to Dr. R. R. Pathak and Dr. V. S. Patil the anatomical structures like spermatic cord, inter-crural fascia, cremasteric fascia, infundibuliform fascia, testicular artery and vein, the ductus deferens with the artery supplying it, testicular nerve may be taken as the common contents of *Vitap Marma* [14].

Considering the ancient views pertaining to the nature of the *Marma*, consequences and area occupied by this

particular *Marma*, it will be justified to accept the inguinal canal through which testicular artery, spermatic cord and pampiniform plexus pass. An injury to over this canal area is bound to damage the spermatic cord and thus may develop the chances of sterility. If the injury is limited to one side of the inguinal canal, then the chances of ejaculation of lesser quantity of semen or oligospermia may be there. If the spermatic cord along with the blood vessels and the ilio-inguinal and genitofemoral nerve are damaged, the chances of impotency due to crush of cord, blood vessels and nerves or blockage of vasdeferens may be there [15].

As injury to this *Marma* causes impotency or oligospermia, so this *Marma* points can also be used for family planning by doing vasectomy.

Ayurveda is not only oriented towards treatment of diseases but also toward prevention & health maintenance. So, *Vitap Marma* can be useful in control of population & family planning policy of Govt.

A simple surgical procedure called vasectomy can be performed at the area of *Vitap Marma*.

Vasectomy

The term "vasectomy" has been derived from vas deferens which is present in the spermatic cord and extends upto scrotum; this tube is blocked during the procedure [16]. Vasectomy is a popular, effective and safe family planning method for couples who want to stop childbearing [17].

How does a vasectomy work?

The testis contains a microscopic cell i.e. sperm which unite with the ovum to cause pregnancy. Vas deferens carries the sperm and it got mixed with other fluids and becomes semen.

Most techniques involve removal of a section of the vas deferens and ligation or cauterisation of the cut ends. For medico-legal reasons, the nature of the excised portion is often confirmed histologically. Spermatozoa remain in the proximal duct system for several months after vasectomy. Thus, the operation cannot be considered a success until at least two successive sperm counts performed about 1 month apart after 20-25 ejaculations are negative. Despite correct operative technique and negative sperm counts, there is a late failure rate of about 1 case in every 500 [18].

Vasectomies don't change sexual desire, erection and feel of ejaculation. The semen just doesn't contain sperm, but the morphology is same.

Types of Vasectomy

1. Conventional incisional vasectomy

It is done with local anaesthesia. The two small cuts are made on scrotum on each side to expose vas deferens tubes. Each vas deferens tube is cut and a small section is removed and the ends of the tubes are sealed off.

2. No-scalpel vasectomy

It is done with local anaesthesia. A tiny puncture or hole is made in the scrotum to access the vas deferens. It is the preferred technique for isolating and accessing the vas deferens. Its aim is to reduce adverse effects such as bleeding, bruising, hematoma, infection and pain and to shorten the operating time [19-21].

Some facts about vasectomy [22, 23]

- It has a lower failure rate.
- It is a permanent procedure and cannot be reversed.
- It is more cost effective.
- It doesn't affect the desire for your sex. There is no problem in erection and ejaculation.
- You have to use contraception for about one to two month as the tubes contains sperm.
- Atleast after 2 or 3 semen tests it will become sure that there is no sperm.
- It possess fewer surgical risk and complication.

DISCUSSION

The word 'Vaikalyakara' is derived from 'Vaikalya' means deprived of some part or abnormality or deformity or disability to do something. Location of *Vitap Marma* mentioned by *Acharya* is the joining area of *Vankshan* and *Vrishan*. In males, injury on *Vitap Marma* leads to *Shandhata* (sterility) or *Alpasukrata* (oligospermia). The dimension of this *Marma* is 1 *Angula*. The Testicular artery is the branch of abdominal aorta, that supplies blood to testis. 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 form testis, which helps to regulate the temperature of testis. This is essential for sperm formation.

If we assume the area of *Vitap 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). Vas deferens injury during herniorrhaphy leads to obstruction and thus sterility. Pressure exerted by varicocele is responsible for sterility. Inflammatory pathogenesis of cord also causes sperm flow obstruction. Torsion or twisting of cord leads to sterility because of obstruction in the pathway of sperm flow.

The involvement of ductus deferens which is affected by surgical procedure or above pathogenesis may lead to reduction in flow of sperm. Thus, it may cause *Alpashukrata* i.e. oligospermia or *Sandhata* i.e. sterility. This traumatic effect of *Vitap Marma* can be beneficial for controlling population and family planning policy of government by doing the planned vasectomy surgical operation.

CONCLUSION

The dominant structure at this site of *Vitap Marma* is considered as spermatic cord in male, round ligament of uterus in female along with other recessive structures of *Mamsa*, *Asthi* and *Sandhi*. The different opinions of both *Acharya Sushruta* and *Vagbhatta* can be justified on the basis of functional and structural anatomy. In males, the spermatic cord structurally looks like a cord; hence it is considered as *Snayu Marma* by *Acharya Sushruta*. As Vas deferens is the constituent of spermatic cord and its function is conduction of sperms, so *Acharya Vagbhatta* termed it as *Sira Marma*. The injury results of *Vitap Marma* can be used therapeutically by the planned surgical procedure called vasectomy for the family planning.

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