

## CRITICAL REVIEW OF VITAP MARMA W.S.R. TO INJURIES &amp; INGUINAL HERNIA

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## ABSTRACT

*Marma* are the important parts of body and any injury to this marma point may cause deformity or sudden death. Concept of *Marma* described by Ayurvedic system of Indian medicine and firstly explained by *Acharya Charaka* but *Acharya Sushruta* give detailed explanation of *Marma* concept. Ayurveda classically mentioned 107 *Marmas* which are classified on different basis including; *Sadyapranahara*, *Kalantara-Pranhara*, *Vishyalghna*, *Vaikalyakara* & *Rujakaramarma*. *Vaikalyakara Marma* is one of the important where injury may cause structural or functional deformity. Various *Vaikalyakara Marma* are situated in *Adhoshakha* such as; *Janu*, *Kurch*, *Urvi*, *Aani*, *Lohitaksha* and *Vitapa*. *Acharya Sushruta* described *Vitapa Marma* as *Snayu Marma* and *Acharya Vagbhata* considered it as *Sira Marma*. Present article described critical aspect of *Vitap Marma* W.S.R. to groin injuries & testicular injuries.

**KEYWORDS:** Ayurveda, Vaikalyakara Marma, Vitapa Marma, Injury.

## INTRODUCTION

*Ayurveda* is holistic science of Indian medical system aimed to *Swatharakshana* (maintain homeostasis) and *Vikarprasham* (cure disease). *Ayurveda* mentioned various concepts including *Marmasharir* and there are 107 *marma* points described in body as per *Ayurveda*. *Ayurveda* described that any pressure to these *Marmas* may leads abnormality. *Marma* is one of the aspects of *Ayurveda* science and knowledge of *Marma* is essential during surgical intervention. *Marma* spread all over the body where *prana* situated and any trauma to these parts leads severe deformities. *Marma* anatomically involves *Mamsa*, *Sira*, *Snayu*, *Asthi* and *Sandhi*. *Ayurveda* classic mentioned various types of *Marmas* depending upon their *Rachana*, *Sthan*, *Viddha lakshanas* and *Parinam*. Depending upon prognosis of injury *Marma* may be described as; *Sadyo-pranahara*, *Kalantara-pranahara*, *Vaikalyakara*, *Vishalyagna* and *Rujakara*. *Vaikalyakara* derived from *vaikalya* which means abnormality or deformity or disability thus *vaikalyakara marmas* indicates points of body where injury can result structural or functional deformity. *Ayurveda* mentioned various types of *vaikalyakara marmas* in lower limb such as; *Kurch*, *Janu*, *Aani*, *Urvi*, *Lohitaksh* and *Vitapa*.

**The Marma and their effect after injury**

- *Sadyapranahara*: *Marmas* to which injury may causes death.
- *Kalantarapranahara*: *Marmas* to which injury may causes delayed fatality.

- *Vishalyaghna*: *Marmas* to which injury may causes harm on *Shalya*.
- *Vaikalyakara*: *Marmas* to which injury may causes debility.
- *Rujakara*: *Marmas* to which injury may causes pain.

The word '*Vitap*' is comes from '*Vitam Vistaramva Paati Pibati*' or '*Vetati-ShabdayateIti*' which mean branch of tree or covering of testis. The *Vitapa Marma* is associated with area of spermatic cord as per traumatic effect since it joins *vrushan* and *vankshan*. *Shandhata* and *alpashukrata* are common effect seen after injury to *Vitap marma*.

*Vaikalyakara marmas* are responsible for structural or functional deformities which are are *Kurch*, *Urvi*, *Aani*, *Janu*, *Lohitaksh* and *Vitap*. *Acharya Sushruta* described *Vitapa Marma* as *Snayu* while *Acharya Vagbhata* described it as *Sira Marma*. *Vitap* is considered with dimension of one *angula* and in male injury to *vitap marma* may leads *vaikaalya* which is *shandhata* or *alpa shukrata*. The *Sthana of vitapa marma* is joining area of *vankshan* & *vrushan*. This region is accompanied with inguinal area which involves spermatic cord and ilioinguinal nerve as chief components. Ductus deferens, cremastic arteries, testicular arteries and pampiniform plexus are other part of this area. The predominance part of this site is spermatic cord which perfume conduction of sperms.

**The following injurious cases may observe with Vitap marma**

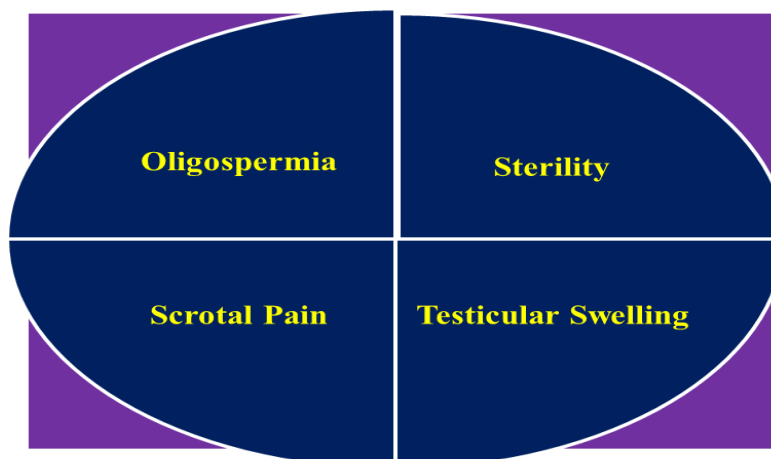
- Spermatic cord injury after surgical trauma.
- Accidental trauma and torsion induced trauma on site of *Vitap marma*.
- Vas deference injury related to herniorrhaphy which further leads to obstruction and sterility. *Varicocele* pressure also causes injury to this site.
- Inflammatory pathogenesis at site leads obstruction in sperm flow.

**Anatomically following structures are associated with Vitapa Marma in males**

- *Mamsa* (muscles and fasciae)
- External oblique aponeurosis
- Internal oblique muscle of abdomen
- Internal spermatic fascia
- Cremasteric fascia
- Inguinal nerve
- Spermatic cord.

**Table 1: Anatomical structures of *Vitapa Marma*.**

S. No.	Anatomical structures of <i>Vitapa Marma</i> in males	Anatomical structures of <i>Vitapa Marma</i> in females
1	External oblique aponeurosis	External oblique aponeurosis
2	Internal oblique muscle of abdomen	Internal oblique muscle of abdomen
3	Internal spermatic fascia	Ilio-inguinal nerve
4	Cremasteric fascia	
5	External spermatic fascia	ligament of Uterus
6	Ilio-inguinal nerve Spermatic cord	
7	Inguinal ligament	



**Figure 1: Common symptoms to *Vitapa Marma* injury.**

#### **Modern Aspect on *Vitapa Marma***

*Vitapa Marma* in lower limb identified as inguinal canal associated with spermatic cord. The inguinal canal lies above the inner half of inguinal ligament. It starts at deep inguinal ring and terminates at superficial inguinal ring. The inguinal canal is about 3.75cm long which developed due to the fall of testis in the embryonic life. The spermatic cord associated with vas deferens, testicular artery, cremasteric artery, genitofemoral nerve, cremasteric nerve and sympathetic components of testicular plexus.

As per modern perspective *Vitap marma* is positioned between inguinal region and testis. Inguinal canal is composed of external oblique muscle and present on both side between anterior superior iliac spine and pubic tubercle. Injury to this point may cause sterility and infertility therefore *Vitap marma* may be correlated with inguinal canal as per modern science. Injury to this cord may obstruct pathway of spermatocytes leading to

oligospermia and severe injury to spermatic cord may rupture it which lead to sterility.

#### **Symptoms of Groin Injuries associated with *Vitap marma***

- Pain in inner thigh
- Decreased strength in upper leg part
- Bruising
- Swelling
- Difficulty to walk
- Pain and tenderness in the groin
- Weakness in groin region
- Pain and swelling around the testicles.

#### **Symptoms of testicular trauma after injury to *Vitap marma***

- Scrotal pain
- Discomfort in abdominal region
- Testicular and scrotal swelling
- Bruising

**Vitap marma injury related to Inguinal hernia**

- Swelling in either side of pubic bone
- Burning or aching sensation
- Pain in groin region
- Dragging sensation
- Pain and swelling around the testicles
- Discomfort while straining

**CONCLUSION**

*Shushruta* considered *Vitap marma* as Aponeurosis while *Vaagbhata* considered as *Sira marma* and as per modern science it can be correlated with inguinal canal. The functioning part of *Vitap marma* is spermatic cord which positioned between pelvic joint and testis. Ayurveda mentioned one *angula* (1.87 cm) *pramaan* of *Vitap marma*. Injury to this site will obstruct pathway of gametes thus oligospermia and sterility may observed.

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