



## Review Article

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### VULNERABILITY OF GUDA MARMA: AN ANALYTICAL REVIEW

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#### ABSTRACT

The knowledge of Marma dates to the Vedic period. The references of 107 Marma, its classification, location, size, injury effect etc., are available in the literature of Ayurveda. Guda is responsible for the elimination of flatus & faces. Guda Marma is situated in this region which is own folded palm (4 Angula) in diameter & injury to this Marma leads to sudden death. Acharya Sushruta explains it as Mamsa Marma, while Vagbhata mentions it as Dhamani Marma. Direct Injury to the anal canal is infrequent due to external structure protecting it, but in case of penetrating injury (foreign body) or severe pelvic injury may injure the anal canal. The most common type of injury to the anal canal is a laceration, then vascular injury. The most affected structure is the anal sphincter. Late attempt of Extensive vascular damage increases mortality & spreading of a perianal abscess may cause sepsis, leading to death.

**Keywords:** Marma, Guda Marma, Dhamani Marma, Perianal abscess, Anal canal

#### INTRODUCTION

Marma Shareera is one of the valuable topics discussed in Sharira Sthana. Recent scholars analysed different Acharya on this subject and developed a summarized form from various angles. Acharya Charaka has mentioned 107 Marma but discussed only Trimarma, namely Hrudaya, Shiras, Basti. Acharya Sushruta also described in detail about these 107 Marma along with their Viddha Lakshana.<sup>1</sup>

Injury to the Marma Sthana leads to different effects that may cause death immediately or delay, survive with deformity. Knowledge of the Marma is described as half of the knowledge of Shalyatantra. Guda region has special importance in Shalya tantra. When representing the structural entity of Guda Marma, there is a controversy, and Acharya Sushruta mentions it is Mamsa Marma where Acharya Vagbhata (Ashtanga Hridayam) say Dhamani Marma.<sup>2</sup> Injury to Guda Marma leads to immediate death (Sadya Pranahara).<sup>3</sup>

#### REVIEW OF LITERATURE

Guda is responsible for the excretion of digestive waste product & also eliminate flatus & faces.<sup>4</sup> Moolasthana of Purishavaha Srotas situated in Guda.<sup>5</sup> It is also a Pranayatanam among Dasha Pranayatan. It is also by another synonym like- Apanam, Payu, Guhyam Gudvartma.

#### Anatomy of Guda Region

Guda is situated inside the pelvic cavity; other organs like Basti, Basti Sira, Vrishanaare interrelated with each other<sup>6</sup>. It is also attached to the Sthulantra (large intestine). It is five & a half Angula length. Subdivided into Uttara Guda, responsible for the accumulation of faces, Adhara Guda eliminated the faecal matter.<sup>7</sup> Guda & Medhra collectively consist of thirty-two sira.<sup>8</sup> Interior of Guda presents three types of folds (Vali) known as Pravahani, Visarjani & Samsarjani (from inside to outward).<sup>9</sup> These three folds are responsible for individual function as Pravahani flows the faces, Visarjani expels out the faces while Samsarjani holds the faces. Each fold is situated one & a half Angula distance from each other & the total length covered by these folds is about four & a half Angula. Folds are the shape of the folds looks like spirals of conch & the colour resembles a palate of an elephant. Gudostha is situated half angula above hairline & the first fold is located one Angula above the Gudostha.<sup>10</sup>

#### Features of Guda Marma

The anal canal is the terminal part of the alimentary tract that extends from the anorectal junction to the anal orifice, 3.8 cm long. It presents two types of sphincters - external (voluntary) & internal (involuntary) anal sphincter. The external sphincter has three parts -subcutaneous, superficial & deep. Interior of anal canal subdivided into three parts by two lines (pectinate line & Hilton's line) - upper area, intermediate area & lower area.<sup>14</sup> Upper area is innervated by superior hypogastric plexus (L1, L2)

& pelvic splanchnic nerve (S2, S3, S4) while the somatic spinal nerve supplies the lower area.

The anal canal is supplied by a superior (upper part) & inferior rectal artery (lower part). The vein around the lower part of the rectum & anal canal makes a plexus known as the annulus haemorrhoidalis. It is formed by the internal venous plexus (superior rectal vein), which surround the anal canal above Hilton's line & external venous plexus (inferior rectal vein), which surround the anus. Both plexuses communicate with each other. From upper part of plexus six vein drains into an inferior mesenteric vein (portal system), from middle part middle rectal vein arise & drain into an internal iliac vein. The inferior rectal vein drains the blood from the lower part of the plexus into an internal pudendal vein.<sup>15</sup> The internal haemorrhoids are situated above the pectinate line & external hemorrhoids are located below the pectinate line (Figure 1 & 2). Features of Guda Marma are explained in Table 1.

**DISCUSSION**

Each Marma consists of Mamsa, Sira, Snayu Asthi & Sandhi; one structure is predominant among all structures. In the case of Guda Marma, there is a conflict between the two Acharya. According to Sushruta, Guda Marma is Mamsa Marma; Astanga Samgrahakara agrees with this view. While Ashtanga Hridayakara opines that it is Dhamani Marma. The exact structure of Guda, some authors correlate with rectum & anal canal, but commentator Ghanekar correlates with anal canal & anal orifice when explaining its function.<sup>16</sup>

Viddha Lakshan of Guda Marma is immediate death, but a specific injury feature does not explain. Acharya Vagbhata mentions injury to Dhamani Marma leads to hemorrhage & the

nature of blood becomes warm, frothy & flows with a sound that leads to the person's unconsciousness.<sup>17</sup>

Ano-rectal region is protected by the rectum's position in the bony pelvis. So, blunt & penetrating injuries are uncommon, but iatrogenic, sex-related, and foreign body injuries occur. The most common injury of this region is a pelvic gunshot wound; Blunt and penetrating injuries to the perineum can cause damage to the anal sphincter and can have substantial morbidity due to concurrent pelvic injury, particularly pelvic fracture.

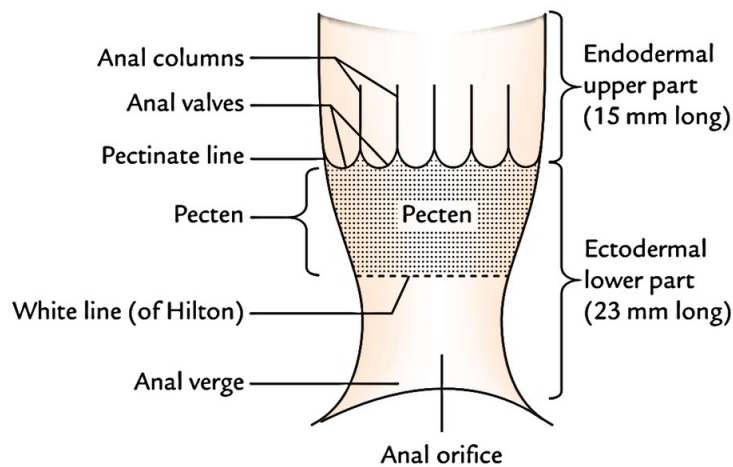
The Traumatic pseudoaneurysm of the superior rectal artery is a rare case. In one study, a patient present with a case was present with repeated episodes of massive lower gastrointestinal bleeding after Angiogram, which shows pseudoaneurysm arising from the superior rectal artery.<sup>18</sup> Rupture of the aneurysm can cause massive blood loss, which leads to the hemodynamically unstable patient. It may lead to hemorrhagic shock.

Perianal abscesses are the most common anorectal abscesses and the peri-anal region's most common soft tissue infection. It may be seen after a post-operative period like hemorrhoidectomy & fistulectomy. An anorectal abscess can lead to complicated perianal sepsis, extending into intraperitoneal and retroperitoneal.<sup>19</sup> This spreading of sepsis and necrotizing fasciitis from anorectal abscesses can cause substantial morbidity and even mortality seen after the postoperative period of hemorrhoids.

With proper management and prompt drainage, mortality from a perirectal abscess is very low. But, in immunocompromised patients, those with Crohn's disease have progressed to a potentially deadly condition such as Fournier's gangrene mortality and morbidity can be significant. Some patients develop a fistula secondary to the disease process or surgical drainage.<sup>20</sup>

**Table 1: Features of Guda Marma**

Features	Sushruta Samhita <sup>11</sup>	Astanga Hridaya <sup>12</sup>	Astanga Samgraha <sup>13</sup>
Location	Udara (Trunkregion)	Udara (Trunk)	Udara (Trunk)
Number	One	One	One
Measurement	Mustiparamita (Own folded palm/4 Angula)	Panitala (Own folded palm/4 Angula)	Panitala (Own folded palm/4 Angula)
Predominant structure	Mamsa Marma	Dhamani Marma	Mamsa Marma
Traumatic effect	Immediate death	Immediate death	Immediate death
Prognosis	Sadyapranahara Marma	Sadyapranahara Marma	Sadyapranahara Marma



**Figure 1: Interior of Anal Canal**

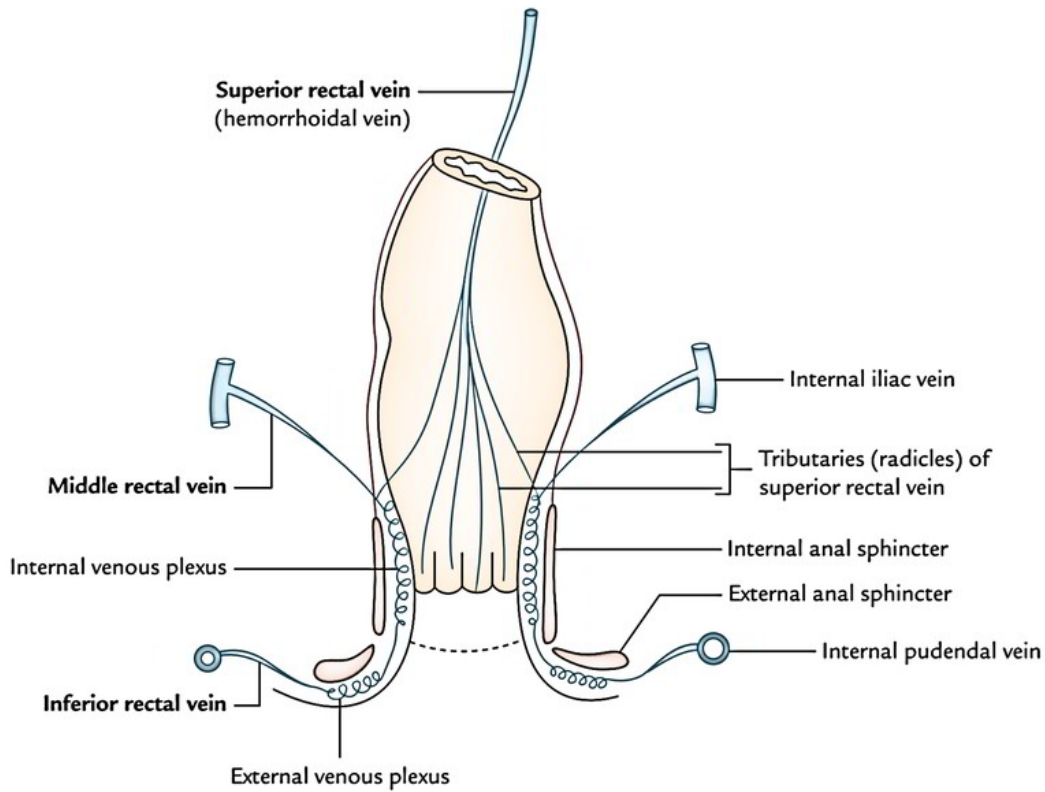


Figure 2: Venous drainage of Anal Canal

## CONCLUSION

Knowledge of Marma Sharira has excellent importance in shalya tantra. The Guda Marma, situated in the pelvic cavity & measured about own folded palm (4 Angula approx.), injury leads to immediate death. Predominant structures are Mamsa & Damani by two Acharya.

Now, day's Blunt and penetrating injuries to the rectum and anal region are uncommon but often have severe associated injuries. Anal injuries some time related to pelvic injury. An internal structure like a neurovascular muscle structure is less affected due to protection provided by external structures. The life-threatening injury should be carefully managed & hemodynamic stability is the priority. Due to the advancement of surgery mortality rate has decreased in case of injury to Guda Marma.

## REFERENCES

1. Sushruta, Sushruta Samhita, Sharir Sthana, Pratyeka Marmanirdesha Shareeram Adhyaya, Chapter 6, Verse 2, Ayurvedarahasya dipika Hindi commentary of Bhaskar Govind Ghanekar. Meharchand Lachmandas Publications, New Delhi; 2013. p.183.
2. Vagbhata, Ashtanga Hridaya, Sharir Sthana, Marmavibhaga Sharira Adhyaya, Chapter 4, Verse 42, Edited by K.R Srikanta Murthy English Commentary, Vol I, Chaukhambha Krishnadas Academy, Varanasi; 2018.p.428.
3. Sushruta, Sushruta Samhita, Sharir Sthana, Pratyeka Marmanirdesha Shareeram Adhyaya, Chapter 6, Verse15, Ayurvedarahasya dipika Hindi commentary of Bhaskar Govind Ghanekar. Meharchand Lachmandas Publications, New Delhi; 2013.p.185.
4. Vagbhata, Ashtanga Samgraha, Sharir Sthana, Marma Vibhaga Sharira Adhyaya, Chapter 7, Verse 5, Edited by K.R Srikanta Murthy English Commentary, Vol II, Chaukhambha Orientalia, Varanasi; 2018.p.91.
5. Sushruta, Sushruta Samhita, Sharir Sthana, Dhamanivyakarana Shareerm Adhyaya, Chapter 9, Verse 20, Ayurvedarahasya dipika Hindi commentary of Bhaskar Govind Ghanekar. Meharchand Lachmandas Publications, New Delhi; 2013. p. 243.
6. Sushruta, Sushruta Samhita, Nidana Sthana, Asmari Nidanam Adhyaya, Chapter 3, Verse 19, Edited by K.R Srikanta Murthy English Commentary Vol I, Chaukhambha Orientalia, Varanasi; 2017.p.487.
7. Charka, Charka Samhita, Sharir Sthana, Sarira Samkhya Sharira Adhyaya, Chapter 7, Verse 10, Vidyotini Hindi Commentary of Kashinath Shastri, Vol-I. Reprint ed, Chaukhambha Bharati Academy, Varanasi; 2018.p.913.
8. Vagbhata, Ashtanga Samgraha, Sharir Sthana, Sira Vibhaga Adhyaya, Chapter 6, Verse 5, Edited by K.R Srikanta Murthy English Commentary, Vol II, Chaukhambha Orientalia, Varanasi; 2018.p.77.
9. Sushruta, Sushruta Samhita, Nidana Sthana, Arsa Nidanam Adhyaya, Chapter 2, Verse 5, Edited by K.R Srikanta Murthy English Commentary vol I, Chaukhambha Orientalia, Varanasi; 2017.p.477.
10. Sushruta, Sushruta Samhita, Nidana Sthana, Arsa Nidanam Adhyaya, Chapter 2, Verse 7, Edited by K.R Srikanta Murthy English Commentary vol I, Chaukhambha Orientalia, Varanasi; 2017.p. 477.
11. Sushruta, Sushruta Samhita, Sharir Sthana, Pratyeka Marmanirdesha Shareeram Adhyaya, Chapter 6, Verse 6,9,15,33,39, Ayurvedarahasya dipika Hindi commentary of Bhaskar Govind Ghanekar. Meharchand Lachmandas Publications, New Delhi; 2013. p .184-185,193,200.
12. Vagbhata, Ashtanga Hridaya, Sharir Sthana, Marmavibhaga Sharira Adhyaya, Chapter 4, Verse10,42,52,62, Edited by K.R Srikanta Murthy English Commentary, Vol I,

- Chaukhambha Krishnadas Academy, Varanasi; 2018.p. 423,428-429,431.
13. Vagbhata, Ashtanga Samgraha, Sharir Sthana, Marma Vibhaga Sharira Adhyaya, Chapter 7, Verse 5,14,15,23 Edited by K.R Srikanta Murthy English Commentary, Vol II, Chaukhambha Orientalia, Varanasi; 2018.p. 91-96.
  14. Datta A K. Essentials of Human Anatomy Part-I, Reprint ed, Current Books International, Kolkata; 2014.p.231.
  15. Datta A K. Essentials of Human Anatomy Part-I, Reprint ed, Current Books International, Kolkata; 2014.p.231.
  16. Sushruta, Sushruta Samhita, Sharir Sthana Pratyeka Marmanirdesha Shareeram Adhyaya, Chapter 6, Ayurvedarahasya dipika Hindi commentary of Bhaskar Govind Ghanekar. Meharchand Lachmandas Publications, New Delhi; 2013.p.193.
  17. Vagbhata, Ashtanga Hridaya, Sharir Sthana, Marmavibhaga Sharira Adhyaya, Chapter 4, Verse 49, Edited by K.R Srikanta Murthy English Commentary, Vol I, Chaukhambha Krishnadas Academy, Varanasi; 2018.p.429.
  18. Iqbal *et al*. Traumatic Pseudoaneurysm of Superior Rectal Artery. Gastroenterology Research .2011; 4(1):36-38.
  19. Mitra A *et al*. Complicated Perianal Sepsis. Indian J Surg (December 2015) 77(Suppl 3): S769–S773.
  20. Amato A *et al*. Italian society of colorectal surgery. Evaluation and management of perianal abscess and anal fistula: a consensus statement developed by the Italian Society of Colorectal Surgery (SICCR). Tech Coloproctol. 2015 Oct; 19(10):595-606.

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