



ANATOMICAL INSIGHTS INTO GUDA MARMA AND ITS SIGNIFICANCE IN ANORECTAL SURGERY

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ABSTRACT:

Ayurveda, often referred to as the science of holistic well-being, places paramount importance on understanding the human body's structural concepts. In this ancient system of medicine, the concept of Marma points plays a pivotal role. These Marma points are considered vital junctures in the human body, where any trauma or injury could have grave consequences. This article explores the significance of Marma points in Ayurveda, drawing upon ancient texts and teachings. These vital points within the body are intricately linked to our physical and energetic well-being. Guda Marma, situated in the region of the rectum and associated with the excretory system, plays a crucial role in promoting overall health. This article explores the anatomy of the Guda Marma, its therapeutic effects, and important precautions to ensure its safety and efficacy. Neglecting the health of the anal canal, or Guda Marma, can have severe consequences, ranging from physical discomfort and dysfunction to life-threatening complications. As such, it is imperative that we recognize its importance and take measures to care for it. This article delves into the surgical applied aspect of Guda Marma, emphasizing its importance in the diagnosis and treatment of anorectal diseases. An understanding of the anatomy and physiology of the anal canal and rectum is crucial for contemporary surgical interventions, especially in addressing prevalent anorectal conditions.

KEY WORDS: Marma, Uttar Guda, Adhar Guda

INTRODUCTION:

Ayurveda, often referred to as the science of holistic well-being, places paramount importance on understanding the human body's structural concepts. In this ancient system of medicine, the concept of Marma points plays a pivotal role. These Marma points are considered vital junctures in the human body, where any trauma or injury could have grave consequences. This article explores the significance of Marma points in Ayurveda, drawing upon ancient texts and teachings. These vital points within the body are intricately linked to our physical and energetic well-being.

Guda Marma, situated in the region of the rectum and associated with the excretory system, plays a crucial role in promoting overall health. Guda Marma's role extends beyond its physical function in waste elimination; it is intricately connected to our overall well-being. Its stimulation and care are essential not only for the proper

functioning of the digestive and excretory systems but also for maintaining the balance of subtle energies within the body. The human body is a marvel of intricate systems and organs, each with its own essential functions. Among these, the anal canal, often overlooked in everyday discussions, emerges as a vital and indispensable part of our physiology. This article explores the significance of the anal canal in excreting waste and toxins, its role as a Marma point, and the potential health implications when it is not properly cared for. It delves into the surgical applied aspect of Guda Marma, emphasizing its importance in the diagnosis and treatment of anorectal diseases. An understanding of the anatomy and physiology of the anal canal and rectum is crucial for contemporary surgical interventions, especially in addressing prevalent anorectal conditions.

Aim:

- To explore the anatomy of Guda Marma, its therapeutic effects, and important precautions to ensure its safety and efficacy.
- To explore the significance of the anal canal in excreting waste and toxins, its role as a Marma point

The Origin of Marma:

The term "Marma" finds its roots in the Sanskrit phrase "Mriyete Asmin Iti Marma," which translates to the possibility of death or severe harm when these vital points are injured. This concept underscores the critical nature of Marma points in the Ayurvedic understanding of the human body.

Acharya Sushrut, one of the foremost ancient scholars in Ayurveda, expounds on Marma points in the Sharir Sthan's 6th Chapter, titled 'Pratyek Marma Nirdesh Sharia.' He defines Marma points as locations where various anatomical elements, such as Mamsa (muscles), Sira (blood vessels), Snayu (ligaments), Asthi (bones), and Sandhi (joints), converge. This convergence creates a unique network of vital energy within the body ^[1].

The Multifaceted Nature of Marma:

Marma points are not merely physical intersections; they are also energetic hubs. According to Ayurveda, they are not only influenced by the three Doshas (Vata, Pitta, Kapha) but also by their subtle forms, such as Prana (life force), Soma (moon energy), Maruta (air energy), and Teja (fire energy)^[2]. Additionally, Marma points are associated with the psychological aspects of Sattva (purity), Raja (activity), Tama (inertia), and Bhutatma (elemental dominance)^[3]. This intricate connection between the physical, energetic, and psychological dimensions makes Marma points central to Ayurvedic diagnosis and treatment.

Signs and Symptoms of Marma Point Injuries:

Ayurveda classics stress that Marma points are highly vulnerable to traumatic injuries. When injured, these vital junctures can exhibit various fatal signs and symptoms. These may include severe pain, loss of consciousness, bleeding, and disruption of the body's vital functions. Understanding these signs and symptoms is crucial in diagnosing and addressing Marma point injuries promptly. The treatment is equally comprehensive. Ayurvedic practitioners employ various therapeutic modalities, including herbal remedies, massage, yoga, and meditation, to restore balance to the injured Marma points. These therapies aim to not only heal the physical damage but also harmonize the flow of Prana and the mental state of the individual.

Categorization of Guda Marma:

- **Madhya Shareera Gata Marma:** Guda Marma falls under this category, indicating its location in the middle portion of the body, the trunk, specifically in the abdominal region.
- **Mamsa Marma:** Predominantly composed of Mamsa (muscle tissue), Guda Marma also contains elements such as Sira (blood vessels), Asthi (bone), Sandhi (joints), and Snayu (ligaments, tendons, nerves), although in lesser proportions.

- **Dhamni Marma:** According to Acharya Vagbhata, Guda Marma is primarily made up of Dhamni (blood vessels).
- **Sadhyo Praanahara Marma:** This term translates to "immediately life-threatening," signifying that an injury to Guda Marma can lead to immediate fatality.

Measurement and Effects of Injury in Guda Marma:

- **Pramana:** Guda Marma has a dimension of 4 Angula (approximately 3 inches).
- **Effect of Injury:** According to Sushruta, an injury to Guda Marma leads to "Tatra Sadhyo Marnam," meaning immediate death. This is attributed to three main causes:
 1. **Vata Vitiation:** Disturbance in the vital force, Vata.
 2. **Vata-Varcha Sanga:** Impact on the flow of Vata.
 3. **Mala Ati Pravritti:** Excessive movement of bodily waste.

Anatomy of Guda Marma:

Acharya Sushruta and Acharya Charaka, two prominent figures in Ayurveda, provide insights into the anatomy and significance of Guda Marma. Acharya Sushruta emphasizes the role of muscles in the formation of Guda Marma, while Acharya Vagbhata posits that vessels are the key components in its formation [4]. Acharya Charaka divides Guda into two parts:

- **Uttar Guda:** The part of the gastrointestinal tract, specifically the rectum, which holds fecal matter before its expulsion [5]
- **Adhar Guda:** The anus, which facilitates defecation.

Acharya Sushruta underscores the importance of Adhar Guda.

Anatomical Details:

Guda, in its entirety, is approximately 4½ Angul (around 3 inches) in length and connects to the large intestine. It features three obliquely transverse folds, named Pravahini, Visarjani, and Samvarini. During contraction, these folds overlap, transforming into 4 Angul. These folds resemble the convolutions of a shell stacked upon one another, bearing a color akin to an elephant's palatine. The terminal end of the anal canal, the anus, is positioned about 1½ Yav (barley) length from the lower hairline. Guda Marma, nestled in the trunk region of the Madhya Shareera (middle part of the body), is intricately connected to the excretory system. It is present as a continuation of the Sthula Antra which can be correlated with the large intestine. Unlike the Sthula antra, guda is also a site of Apana Vayu [2]

The Location of Guda Marma in Ayurveda: It is intricately connected to the Sthulantra, which corresponds to the large intestine. It serves as the passage for both vata (flatus) and mala (feces). The measurement of Guda, or the anus, is standardized at four and a half Anguli Praman, providing a precise anatomical reference point.

The Continuation from Sigmoid Colon to Anal Canal: In the context of modern anatomy, understanding the location of Guda Marma becomes even more comprehensive. The rectum, a vital component of the gastrointestinal system, starts as a continuation of the sigmoid colon, marking its beginning at the 3rd sacral vertebra. This connection emphasizes the seamless integration of the rectum within the digestive tract.

The Dimensions of the Rectum and Anal Canal: To appreciate the intricacies of Guda Marma, it is crucial to grasp the dimensions of the rectum and the anal canal. The rectum, a crucial part of the large intestine, is approximately 12 cm long. Its upper portion boasts a diameter of 4 cm, ensuring the efficient storage of fecal matter before elimination. The lower segment of the rectum seamlessly transitions into the anal canal at the anorectal junction.

The anal canal, with a length of approximately 4 cm, signifies the final stretch of the gastrointestinal tract before the feces are expelled from the body. This specific region, from the anorectal junction to the anus, is included in the Ayurvedic definition of Guda Marma.

Modern Anatomy's Inclusion of Guda Marma: When viewed through the lens of modern anatomy, Guda Marma encapsulates the entire anal canal and the lower portion of the rectum. This broader perspective highlights the comprehensive nature of Guda Marma, encompassing the anatomical elements associated with the excretory system.

Stimulating Guda Marma ^[6]:

- Basti Karma: Vasti, a therapeutic enema, is a well-known Ayurvedic procedure that stimulates Guda Marma. It involves the introduction of medicated substances into the rectum. Vasti is renowned for its ability to cleanse and rejuvenate the excretory system.
- Ganesh Kriya: Ganesh Kriya is a yoga practice that involves specific movements and breath control techniques. It targets the abdominal region and aids in the activation of Guda Marma.
- Ashvini Mudra: Ashvini Mudra, also known as the horse gesture, involves the contraction and relaxation of the anal sphincter muscles. Regular practice of this mudra helps activate Guda Marma and improves the tone of the pelvic floor muscles.
- Mooladhara Bandha: Mooladhara Bandha, a yogic lock, focuses on the root chakra located at the base of the spine. It is closely associated with Guda Marma. Engaging in Mooladhara Bandha practices helps awaken the energy residing in this region.
- Mahamrityunjay Mantra: The recitation of the Mahamrityunjay Mantra, a potent Vedic chant for healing and protection, can be combined with Guda Marma stimulation to enhance its effects. This mantra is believed to invoke healing energies.

The Role of Guda Marma in Kundalini Activation:

Guda Marma holds a unique place in Ayurveda due to its association with the Mooladhara Chakra. The Mooladhara Chakra, often referred to as the root chakra, is located at the base of the spine. It is considered the foundation of the subtle energy system and is associated with the dormant Kundalini energy. The Kundalini energy, symbolized as a coiled serpent, resides within the Mooladhara Chakra. Stimulation of Guda Marma is believed to activate and awaken this powerful energy. When Kundalini rises, it ascends through the chakras, leading to spiritual awakening and transformation.

Precautions for Guda Marma Stimulation ^[6] :

While harnessing the power of Guda Marma, it is crucial to exercise caution and adhere to certain precautions to prevent any potential harm:

- **Careful Procedures:** Procedures like Kshar Karma (use of alkalies), Agni Karma (cauterization), and Shstravcharn (use of sharp instruments) involving the rectum should be performed meticulously and by qualified practitioners.
- **Awareness:** Ignorance or carelessness during these procedures may lead to adverse effects, including impotency, swelling, burning sensations, unconsciousness, flatulence, diarrhea, dysentery, or even a life-threatening situation.
- **Qualified Practitioners:** Seek the guidance and services of experienced Ayurvedic practitioners or yoga instructors when performing Guda Marma stimulation techniques to ensure safety and efficacy.
- **Personal Comfort:** Ensure that you are comfortable and relaxed during the practice. Any discomfort or pain should be immediately addressed.

Health Implications of Neglecting Guda Marma:

Neglecting the health of Guda Marma can lead to a range of health issues and complications. The consequences of such neglect can be severe and may include:

- **Impotency:** Dysfunction in the anal canal can lead to impotency, affecting one's reproductive health and overall quality of life.
- **Swelling:** Inflammation or swelling in the anal canal can cause discomfort and pain, affecting mobility and daily activities.
- **Burning Sensation:** Conditions like hemorrhoids or fissures can result in a persistent burning sensation in the anal region, causing significant discomfort.
- **Unconsciousness:** Severe anal canal issues, if left untreated, can lead to systemic health problems, potentially resulting in unconsciousness.
- **Flatulence:** Dysfunction in the anal canal may disrupt the normal passage of gas, leading to flatulence and discomfort.
- **Diarrhea and Dysentery:** The anal canal's role in waste elimination means that its health is directly linked to the proper functioning of the digestive and excretory systems. Neglecting it can contribute to diarrhea and dysentery.
- **Life-threatening Complications:** In extreme cases, the neglect of Guda Marma can lead to life-threatening situations if conditions like abscesses or severe infections develop.

Correlation of Guda Marma with Modern Anatomy ^[7] :

Ayurvedic texts describe Guda Marma as a vital point encompassing the anus and the lower part of the rectum. According to modern anatomy, the length of the anal canal typically extends up to 4 cm. This modern measurement aligns closely with the Ayurvedic concept, where one angula is approximately 1.5-2 cm in breadth. Therefore, considering these measurements, the length of Guda (Anus) can be estimated to be around 7.0-9.0 cm, emphasizing the similarity between Ayurvedic and modern anatomical descriptions.

Understanding the Muscular Component: Guda (Anus) primarily comprises muscular structures. Modern anatomy recognizes the presence of critical muscles in this region, including the sphincter ani internus and externus, as well as the levator ani muscles. Ayurvedic texts classify Guda Marma as a Mamsa Marma, signifying its association with muscle tissues. However, it is essential to note that Guda Marma is also linked to a unique vidha lakshana, where damage to this vital point can lead to sudden death.

Vascular and Nervous Structures: Modern anatomy reveals that the anal canal is surrounded by intricate blood vessel plexuses, nerve plexuses, and portosystemic shunts, which play crucial roles in maintaining the rectal and anal functions. Damage to these structures can have severe consequences. Ayurveda recognizes the significance of these structures by categorizing Guda Marma as a Dhamni Marma. The inclusion of vascular and nervous elements in this classification highlights the potential dangers associated with this vital point.

Three Valis of Guda Marma: Ayurvedic texts further divide Guda (Anus) into three valis—Samvarani, Visarjani, and Pravahini. Modern dissections have validated these divisions, with Samvarani located approximately 1 angula (1.5-2 cm) from the anal margin (Anus). Visarjani is positioned 1½ angula above Samvarani, while Pravahini rests 1½ angula above Visarjani. These divisions align closely with the anatomical structures in the region, such as the anorectal ring and the Houston's valves.

The Significance of Guda Marma in Surgical Practice [7]:

Guda, which refers to the anus, is classified as a Marma - a vital point in the body. In surgical procedures, particularly for diagnosing diseases and performing surgeries, the knowledge of various organs and structures is imperative due to their intricate anatomy and physiology. Anorectal diseases have become increasingly common in recent times, primarily due to shifts in dietary habits and lifestyle. To effectively address these modern-day health challenges, a sound understanding of the surgical anatomy of the anal canal and rectum is essential.

One prominent ailment addressed in the classics is Arsha, commonly known as piles. According to Sushruta, Arsha originates from the valis of Guda (Anus). Arshas arising from Samvarani and Visarjani valis are generally easier to treat. In contrast, those originating from Pravahani Vali pose greater challenges and are more likely to be considered incurable. Understanding the specific location and origin of these conditions is vital for devising effective surgical interventions.

For performing Surgical Procedures, knowledge of Anatomy is very important. For fissure in ano, surgical procedures like fissurectomy or sphincterotomy may be necessary. In these cases, a comprehensive knowledge of the anatomy of the anal canal and rectum is paramount. Surgeons must be skilled in recognizing the sphincters, understanding the nuances of the anal canal, and having a thorough grasp of rectal anatomy to ensure precise and effective surgical interventions. It is crucial to differentiate between acute and chronic fissures in the anal canal. In acute fissures, the anal canal skin is broken, revealing longitudinal fibers on the fissure floor. These unstriped muscle fibers are derived from the fibers of the conjoint longitudinal muscle, which traverse the lower end of the internal sphincter. In contrast, chronic fissures exhibit different characteristics, with longitudinal fibers disappearing and fine white circular fibers appearing across the fissure floor. Similar is in the case of Fistula-in-ano.

DISCUSSION:

Ayurveda, the ancient system of holistic medicine, delves into the intricate web of human anatomy and physiology, recognizing the significance of Marma points – vital points of the body with profound effects when injured. One such Marma point is Guda Marma, located in the Madhya Shareera (middle part of the body), specifically in the trunk region. This article explores the multifaceted aspects of Guda Marma, its categorization, the implications of injury, anatomical details, and its pivotal role in Ayurvedic understanding.

The anal canal is a remarkable organ responsible for a crucial function- eliminating contaminants, waste substances of metabolism, and toxins from our body. This process, termed Mala Utsarga, is fundamental to maintaining cleanliness, safety, and overall health. It ensures that the byproducts of digestion and cellular processes, which would otherwise harm the body if retained, are efficiently expelled. The anal canal's role in excretion cannot be overstated. It forms a critical part of the digestive and excretory systems, working in conjunction with the large intestine and rectum to facilitate the expulsion of fecal matter. This function is pivotal in preventing the accumulation of harmful substances within the body, promoting overall well-being.

Neglecting the health of the anal canal, or Guda Marma, can have severe consequences, ranging from physical discomfort and dysfunction to life-threatening complications. As such, it is imperative that we recognize its importance and take measures to care for it. Proper hygiene, a balanced diet, and attention to any signs of discomfort or dysfunction are all critical steps in ensuring the health and well-being of this vital organ. Ultimately, by understanding and appreciating the role of the anal canal, we can contribute to our overall health and quality of life.

CONCLUSION:

Marma points hold a unique and critical place in Ayurveda's understanding of the human body. They are not just anatomical landmarks but also energetic and psychological centers that influence our overall well-being. Recognizing the significance of Marma points and their vulnerability to injury underscores the depth and complexity of Ayurvedic medicine. It reminds us that healing is not merely the absence of physical ailments but

the restoration of harmony within the body, mind, and spirit. In the intricate tapestry of Ayurveda, Guda Marma stands as a pivotal and sensitive point. Its location in the middle of the body, its composition predominantly of muscle tissue and blood vessels, and its classification as a Sadhyo Praanahara Marma all underscore its critical importance. Understanding the dimensions and anatomical intricacies of Guda Marma is not only vital for Ayurvedic practitioners but also for anyone interested in holistic health. It highlights the profound knowledge of the ancient Ayurvedic scholars and their ability to integrate anatomy, physiology, and spirituality into a comprehensive system of medicine. Guda Marma offers a gateway to well-being by positively impacting the excretory system and playing a role in Kundalini awakening. Stimulating Guda Marma through various techniques, including Vasti Karma, Ganesha Kriya, Ashvini Mudra, Mooladhara Bandha, and the Mahamrityunjay Mantra, can bring about transformative effects on physical, mental, and spiritual levels. However, it is essential to exercise caution and follow safety measures to harness the full potential of Guda Marma while avoiding potential complications.

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