

A CRITICAL STUDY OF GUDA SHARIR- A LITERARY REVIEW INSTEAD OF CRITICAL IT IS CRITICAL

Sangeeta Kanade^{1*}, Dinesh Jadhav² and Snehal Jadhav³

¹PG. Scholar, Department of Rachana Sharir, Government Ayurveda College, Osmanabad.

²PG Scholer, Department of Kriya Sharir, Government Ayurveda College Nanded.

³PG Scholer, Department of Rachana Sharir, Government Ayurveda College Osmanabad.

Article Received on
24 Feb. 2021,

Revised on 16 March 2021,
Accepted on 06 April 2021

DOI: 10.20959/wjpr20215-20281

*Corresponding Author

Dr. Sangeeta Kanade

PG. Scholar, Department of
Rachana Sharir, Government
Ayurveda College,
Osmanabad.

ABSTRACT

Aim: To elaborate literary review of *Guda Sharir* with correlation of anatomical significance described in Ayurveda to contemporary science *Guda* is defined as the passage through which excretion of faeces and flatus takes place. It is one of the *Bahirmukha strotas* and also considered as one of the *Karmendriya*. *Guda* is mentioned as one of the *Koshtangas* by *Acharya Charak* and also recognized two parts in it i.e. *Uttara Guda* and *Adhara Guda*. Embryologically it is derived from *matrujabhava*. Total length of *Guda* is 4 & ½ angula. Three Valis are present in the *Guda* which are placed one above the other. The distance between each *vali* is in 1 & 1/2 *angula* and are named as *Pravahini*, *Visarjani* and *Samvarani*. *Guda* is characterized as *moola*

of *Purishvaha Strotas* and also related to *Annavaha strotas*. *Guda* is also related to one of the *Sushrutokta kala* i.e. *Purishdhara kala* One of the vulnerable spot “*Guda Marma*” which is *Sadhyapranahara* in nature. The disease related to *Guda* is *Arsha*, *Parikartika*, *Bhagandara*, *Nadivrana*, *Guda bhramsha*, *Sanniruddha Guda*, *Guda vidradha*.

KEYWORDS: *Guda*, *Uttar Guda*, *Adhar Guda*, *Guda marma*, *Guda vali*, *Purishvaha Strotas*.

INTRODUCTION

Ayurveda is *Upved* of *Atharvaved* and one of the holistic medicine systems in the world. The main aim of Ayurveda is to protect the health of *Swastha* (Healthy person) and to cure the *Atura* (patients) from disease. In Ayurveda *Sharir* is divided in to six parts i.e. 4 *Shakha*

(Extremities), Madhyam (trunk or *Koshtha*) and *Shira* (Head and neck). *Guda* is one of the organs of *Koshthagas*. It is divided into *Uttar Guda* and *Adhar Guda*.

The terminal part of intestine is called as *Guda*. *Guda* is defined as the passage through which excretion of flatus and faeces takes place. It is one of the *bahirmukh strotas* and *muladhara chakra* is placed at pelvic region. *Shravana* i.e., two ears, *nayana* i.e., two eyes, *Vadan* i.e., mouth, *Ghrana* i.e., two nostrils, *Guda* and *Medhra* i.e., urethra they are considered as *Bahyastrotas* which opens on the surface of our body.

From the explanation maintained above *Guda* can be considered as a tubular structure which opens on the surface of the body i.e., the perineal region. It is considered among one of the *karmendriya* as it carries a specific function of *Visarga* i.e., excretion of *purisha*.

Discussion of the anatomical details about the *Guda* like – embryological development, *Nirukti*, Synonyms, location etc. are scattered from the Ayurvedic *Samhitas* to here.

AIMS AND OBJECTIVES

To elaborate the literary review of *Guda Sharir* from various *Ayurvedic* text.

MATERIAL AND METHOD

References and data about *Guda* are collected from various Ayurvedic text. From *Brihatrayi*, other journal and relevant articles, scientific review papers and previous work done in related to *Guda* along with details of contemporary science on the topic was reviewed and relevant information was collected.

DISCUSSION

Vyutpatti

(*Gu +da*)

Gu = *mala* or *Vishta* and *da* = to give, overall meaning is the organ which gives faeces/stool.^[1]

Nirukti

According to *Ayurvedic shabda kosha* “*Guda* is the organ which evacuate *Apana Vayu*.”

Synonyms

Parashar Samhita- Apana, Guda, Payu, Braghna

Amarkosh- Apanam

Vachaspati- Vitmarg

Vijayrakshita- Apanah

Charak- Uttar Guda, Adhar Guda, Stula guda

Sushruta- Gudamandala, Gudavalaya, Payuvalaya, Gudoshtha

Vagbhata- Guda marga

Dalhana- Gudantram

Formation of guda

Embryologically *Guda* is derived from *matruja bhava*^[2] (maternal element). *Antra*, *Guda* and *Basti* is formed from the essence (*Prasad bhag*) of *Rakta* and *kapha* digested by *pitta* along with the help of *Vayu*.^[3] In the conference *Acharya Bhadra Shonak* hypothesised that *Pakvashaya* and *Guda* are those organ which is developed at the very first stage in foetus which is coated in *charak Sharir Sthana*. Whereas *Acharya Atreya* disproof his hypothesis and explains the ultimate opinion lord *Dhanwantari* that all organ developed simultaneously from the beginning.^[4]

Location (Sthana)

Acharya Sushruta mentioned that *Guda* is attached to *Sthulantra* (Large intestine) which measures about 4 & 1/2.^[5] *Apana Vayu* present is present here which plays its normal function of excretion of flatus and faeces. In the context of anatomical position of *Basti*, *Sushruta* says that *Basti* is located in between *Nabhi*, *Pristha*, *kati*, *Mushka*, *Guda Vankshana* and *Shephas* and *Bastishirs*, *Vrishana* and *Guda* are all interconnected with each other. All above mentioned organs are situated in *Gudasthivivara*.^[6]

Measurement

According to *Acharya Sushruta and Vagbhata* the total length of *Guda* is 4 & 1/2 *Angulas*.^[7] *Parimana* of *Guda* is *atmpanital*^[8] according to *Acharya Vagbhata* while according to *Acharya Dalhana* one *Angula* is maximum width of thumb^[9] which is practically equal to 2cm. Therefore total length of *Guda* is 4.5 *Angulas* or 9cm, and total length of rectosigmoid junction to anal verge is 16.5cm.

Swaroopa

Guda seems like *shankha Nabhi* (conch shell) having many spirals in shape, may be correlated with rectum and anal canal which consist of anteroposterior and lateral curvature.^[10]

Parts of *guda*

According to *Acharya Charaka*, the *Guda* is divided into 2 parts one upper part where *Pureesha* is collected known as *Uttara Guda*, other lower part where *pureesha* is expelled out is known as *Adhara Guda*.^[11] Both the *Uttara Guda* and *Adhara Guda* are described among the 15 *koshthanga* and *Gudoshtha* by *Acharya Charak*.^[12] As in modern , parts of rectum above the middle Honston valve act as reservoir of faeces, can be correlated with *uttara Guda* (distal rectum) and below middle Houston valve helps in defecation, can be correlated with *Adhara Guda* (anal canal).

Table 1.

| S. no | Parts of <i>Guda</i> | Modern terminology |
|-------|----------------------|---|
| 1 | <i>Uttara Guda</i> | Upper part of rectum and sigmoid colon or Distal Rectum |
| 2 | <i>Adhara Guda</i> | Lower Part of rectum and anal canal |
| 3 | <i>Gudoshtha</i> | Anal orifice |

Interior structure of *guda*

Acharya Sushruta described that interior of *Guda* Contains three *Valis*. They are *Pravahini*, *Visarjini* and *Samvarni*. The *Vali* is situated at a distance of 1 & ½ *Angula* from the hair margin. *Gudoshtha* (anal orifice) is situated at a distance of half *Yava* (half finger) in length and first *Vali* is present at a distance of one *Angula* from anal orifice.^[13]

The *Vali* are arranged spirally (*shankhavartanibha*) and resembles the color of palate of an elephant (*Gajatalu*).^[14]

Table 2.

| S. no | <i>Guda Vali</i> | Situation | Modern Terminology |
|-------|------------------|-----------|------------------------|
| 1 | <i>Pravahini</i> | Proximal | Middle Houston valve |
| 2 | <i>Visarjini</i> | Middle | Inferior Houston valve |
| 3 | <i>Samvarani</i> | Distal | Dentate line |

Acharya Vagbhata has further classified the position of these *valis*. Proximal one as *pravahini* and distal one as *Samvarni* and middle one as *Visarjini*. *Gudostha* is situated 1

Angula away or distal to *Samvarni*. *Pravahini* is situated most internally $1\frac{1}{2}$ *angula* to *Visarjini* and *Visarjini* is situated $1\frac{1}{2}$ *angula* above *Samvarni*. Each *Vali* is 1 *Angula* in length and the distance between two *Vali* is $\frac{1}{2}$ *Angula*. Hence the length of *Guda* including *Gudostha* is $4\frac{1}{2}$ *Angulas*.^[15]

Structure involved in *guda* anatomy

Asthi: There are 5 *Asthi* which forms the *shroni* (Pelvic region). They are *Guda*, *Bhaga*, *Trika*, and 2 *Nitamba Asthi*.^[16]

Sandhi: In *Guda*, *Samudga* type of *Sandhi* is present.^[17]

Peshi: There are 3 *peshi* in the *Guda*.^[18]

Sevani: There is 1 *Sevani* present in the relation of *Guda*.^[19]

Vasculature of *guda*

Out of 700 *siras* present in the body 34 *Siras* are present in the *Koshtha* and out of these 34 *siras* of *koshtha* 8 *siras* supplies the *Guda*, *Medhra* and *Shroni*.^[20]

There are 10 *Adhogami Dhamanies* which carry *Apana Vata*, *Mutra*, *Shukra* and *Artava* to their respective organ. Two *Dhamani* out of them carry the function of defecation.^[21]

Guda in various contexts

Guda as *marma*

According to regional classification *Guda marma* is mentioned under *Guda marma* and *Sadyapranahara marma* as injury to these *marma* causes sudden death by *Acharya Sushruta*.^[22]

Acharya Vagbhatta mentioned *Guda Marma* under *Dhamani Marma*.^[23]

Guda as *koshthanga*

Acharya Charak considered *Guda* in term of *uttar Guda* and *Adhar Guda* as under 15 *koshthanga*.^[24]

Guda as *strotas*

Sthula Guda is mentioned one of roots of *purishvaha Srotas* by *Achaarya Charka*^[25] while the term *Guda* as one of the root of *Purishvaha Srotas* by *Acharya Sushruta*.^[26]

Guda as karmendriya

Guda is described as one of the *karmendriyas* by *Acharya Charak* and its function is *visarga*.^[27]

Guda in muladhara chakra

Muladhara Chakra (inferior hypogastric plexus) is present near *Guda* and genitalia.

Guda as pranayatana

Acharya Charak has mentioned *Guda* in *Dashpranayatana*s.^[28]

Guda as vata sthanam

Acharya Sushruta considered *Shroni* (pelvic region) and *Guda* as the *sthana* of *Vata*.^[29]

As basti chikitsa

Acharya Arundatta, the commentator of *Ashtang Hridayam* mentioned that *Basti* (*Niruha* and *Anuvasana*) is the best *Chikitsa* (Treatment) of *Vata* which is given in *Guda*.^[30]

Anatomical relations

Acharya Sushruta commanded in the context of operation of *Ashmari* (vesicle calculus) that surgeon should place his finger into the *Guda* and stabilize the *Ashmari* to make a prominence in perianal region. It denotes that *Guda* is located very closely posterior to *Basti*.^[31]

According to *Acharya Sushruta*, *Basti* (urinary bladder), *Basti sira* (head of bladder and fundus), *Paurush* (prostate gland), *Vrishan* (testicles) and *Guda* (ano-rectum) are interrelated and situated inside the cavity of pelvis.^[32]

Physiological concept of guda

Guda is considered as one of the *PanchaKarmendriyas* and its function is to excrete the faeces/mala from the body.^[33] The act of defecation and maintain the continence is accomplished with the help of *Apana Vayu* and the three *Valies*. *Arundatta* the commentator of *Ashtanga Hridayam* and *Gannatha Sen* described the proximal *Vali* is *Pravahini* which helps in straining and pushing the stool downwards. The *Madhyama Vali* is *Visarjani* which allows the stool to evacuate from the body and *Samvarani* which expels the stool out of the body plays voluntary control and immediately constricts the *Guda*.

Pathological aspect of *guda*

In context of Ayurvedic literature the term “*Guda*” denotes both anal canal and rectum which according to the Modern Medical Science is indicated by the united term of anorectum. The description of various disease related to anorectal region is found in Ayurvedic texts. These are *Arsha* (Haemorrhoids), *Parikartika*(Fissure in ano), *Bhagandara*(fistula in ano), *Gudabhramsha*(Rectal Prolapse), *Sanniruddha Guda* (Ano-rectal Stenosis), *Nadivrana*(Sinus), *Guda Vidradhi*(Anal abscess)etc. Constipation, indigestion, improper diet, stress, reduced digestive fire (*Mandaagani*), lack of exercise, faulty life style, improper toilet training, spicy food, intake of excess meat etc. these are reasons behind anorectal disorders.

CONCLUSION

By the above discussion, conclusion is that anatomy and physiology of Rectum and anus is explained in very scientific way from ayurvedic text such as *Charak*, *Sushruta* and *Vagbhata*. It is useful for understanding the pathogenesis of disease, and further treatment. As a *Marma* point of view, it is very important in surgical and parasurgical interventions in the region of anorectum. The total length of *Guda* is 15-16cm which includes 4 cm anal canal & 12cm Rectum. Embryologically *Guda* is developed by *Matrij Bhava*, and it is one of *Koshthang*, included in *Dashpranayatanas*. *Muladhara* chakra present between *Guda* and genitalia which is in pelvic nerve plexus. *Guda* is one of the *Sthana* of *Vata* and *Basti Dravya* are also administered in the *Guda*. *Basti* is administered in the *Guda* in left lateral position. This indicates that *Guda* plays important role in absorption of *Basti*.

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