Original Resear	Volume-9 Issue-6 June-2019 PRINT ISSN No. 2249 - 555X Ayurveda COMPREHENSIVE STUDY OF AANTRA IN BRUHATRAYI AND ITS CORRELATION WITH MODERN SCIENCE.			
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ABSTRACT It is very hard task to compare any structure of body described in Ayurveda Samhita with modern anatomy, In Ayurveda, terminology carries different connotations of the same words with their context, Antra is one of them, it is the word commonly used in all text of Ayurveda, again Acharyas used various terms for the same organ in different places, like Pawkashaya, Purishadhar, Unduk, Shtulantra, Kshudranta and Dimbha so it create more confusion to the beginner to find out its exact correlation with the modern anatomy, and it become hard to study the relevant topic, so to try to overcome this lacuna this study was generated thorough review of literature from Bruhatrayi and all available sources. The review literature of antra and present Knowledge of moderns science indicates that pakwashaya, Purishadhar, Shtulantra, Kshudranta, Unduk, Dimbha can correlate with large intestine, caecum, Large intestine, Small intestine, caecum and sigmoid colon respectively.				
KEYWORDS : Antra, Intestine, Pakwashaya, Purishadhar, Unduk				

INTRODUCTION

In Ayurveda, the sciences which deal with the scientific principles of anatomy and physiology both have been recognized as Sharir. This is why in Sushrut samhita ,Charaksamhita and Ashtang Hrudaya has the chapters which deals with the normal anatomy and physiology of human body have been collectively described in Sharirsthan. All these three Samhita collectively called as Bruhatrayi, Among which Acharya Sushruta, the founder of Ayurvedic Sharir and father of surgery elaborated human anatomy. By conducting practical cadaveric dissections in that ancient time without any high definition instruments.

He described various anatomical structures like Kandara, Jala, Kurcha, Sevani, Asthisanghath, Simanta, Sandhi, Snayu, Peshi, superiority of surgery, preparations of dead body, mode of dissection and organs as in terms called Ashaya and Koshthang. But there are different visions about these terminologies in different compendia, like about Kosthanga. The number of Kosthang as are different along with their name. such as Charakacharya describe 15⁽¹⁾ Koshthanga, Sushrutacharya describe 8, ⁽²⁾ Koshthanga and Vaghbhatacharya describe 11, ⁽³⁾ there are several reasons behind this controversies, like the terms used for Antra is different in all text, along with its numbers and the terminologies which are used about them is also different. These different terminologies create more confusion regarding the organ, so this study was initiated thorough review of relevant literature from all available sources, which may be beneficial for clinicians and the students for the study.

AIM: - To study Aantra in Bruhtrayi and its correlation with modern science.

OBJECTIVES: -

1. To study of Antra in Bruhatrayi

2. To compare different terminologies of antra with the modern anatomy

Methodology: The data has been collected and reviewed from Charak Samhita, Sushruta samhita and Ashtang Hrudaya, other validated textbooks and publication in international journals.

Review of literature

ANTRA

There are several terminology used for the word Antra in different in Bruhtrayi

Charak Samhita

Acharya Charaka mentioned various types of Aantra in Koshthanga. These are Pakwashaya, Purishadhar, Kshudrantra, Sthulantra, Adhargud and Uttargud. Anatomical or physiological explanation of each term is given by the commentator Chakrapani

1)Antra

Antra is the common term in all text , Charak mentioned this term while explaining the functions of Aapan Vayu. $^{\scriptscriptstyle (4)}$

2) Pakwashaya

As per the Acharaya Pakwashaya is the organ which is situated below Pittashaya and Amashaya. $^{\scriptscriptstyle(5)}$

3) Purishadhar

In Atisar Chikitsa while describing the pathophysiology of Atisar Acharya explained that the mal come to Purishadhar from Pakwashya.⁽⁶⁾

4) Kshudrantra is compared with Grahani or a small intestine.

5) Sthulantra

stoolantra is mention in the moolsthan of the Purishvah Srotas, the actual word used by the Acharaya here is Sthulgud, Sthulagud is directly compare with the Sthulantra. Here acharya used term Sthulantra to the terminal part of the intestine.⁽⁷⁾

6) Uttargud

Acharya further divide gud into two parts Uttergud and Adhargud by its function i.e. purisham avatishthate mean the organ where faecal matter is stored for some time is Uttargud⁽⁸⁾

Sushrut Samhita

In sharirsthan acharya gives a single term Aantr ain Sharirsthan while explaining the Angapratynaga but during the explanation of Koshthanaga he describe Pakwashay. And in Arshanidan chapter he gives another term Sthulantra related with the antra.

1)Antra

Acharya explained the term Antra by its length which three and half Yam in male and in female it is short by half Yam. In Sankhya Sharir Acharya gives only a single term Antra. While explaining further, he gives other terms according to their position and function.⁽⁹⁾

2) Pakvashaya

Acharya gives brief information about the term Pakwashya. He explained Pakwashay as a Koshthang and in Ashaya, ⁽²⁾ here Pakwa is the word use for the organ Pakwashya. The location of the Pakwashya according to the Acharya is in relation with Shroni and Gud below and Nabhi above.⁽¹⁰⁾

Acharya gives the types of the Pakwashaya according to their function they are Vataashayabheden and Pittashaybheden.⁽¹¹⁾

3) Stulantra

In Arsh Nidan Acharya gives another term Sthulantra, this is the

INDIAN JOURNAL OF APPLIED RESEARCH 45

portion of the Antra which is attached to gud. Sthulantra, Katiaantra and Gudantra are the words used here as alternative names used by the Dalhna, these names are given here according to their location and attachment. (12

4) Unduk

This the organ mentioned by the Sushruta while explaining the Maladhara Kala, here he explains that the organ is like the sac

Ashtanghrudaya

Acharya gives several term to the Antra. Here Antra as well as dimbha is used in koshthang while vagbhata gives two types of Antra in sharirsthan that is stulantra and sukshmantra.

1)Antra

Acharya used Antra word in koshthanag, Acharya gives same length of Antra in male and female to that of Sushrut i.e. three Yam in female and three and half Yam in male.

Antra is derived from Prasad bhag of Rakta and Mansdhatu.⁽¹⁴⁾

2) Dimbha

Dimbha is the organ include in Koshthang by Vagbhat, the organ related to the faecal matter which gives support to it. Dimbha is the word only used in Ashtanghruday and its commentary by Arundatta.

3) Sukshmantra

Acharya gives two types of Antra, they are sukshmantra and stulantra. This divisions are may according to their shape and size.⁽¹⁾

4) stulantra

stulantra is the terminal portion of the Antra which attach to the rectum.

5) pakwashaya

It is the organ where Vat Dosh is mainly present, also it is mentioned as an Ashaya out of 7 Ashaya. (17)

DISCUSSION

46

After complete review, the terms which are used for the Antra area listed in tabulated manner below.

Table no 1- Term for Antra in Bruhatryi

Sr no.	CHARAK	SUSHRUT	VAGABHAT
1	Antra	Antra	Antra
2	Pakwashaya	Pakwashaya	Pakwashaya
3	Kshudrantra	Unduk	Sukshmantra
4	Sthulantra	Sthulantra	stulantra
5	Purishadhar		Dimbha
6	Uttargud		

Out of which Pakwashay and Antra are the terms almost used in all the Bruhtrayies, Anatomically Pakwashaya is an organ situated in the abdominal cavity, which is situated below the gall bladder at right side and stomach at left side both are placed at around 9th costal margin and above the true pelvis in relation with uterus and urinary bladder. Physiologically is the main organ, having the function of absorbing large amount of water. After complete process of digestion, it act as a storehouse of the faecal matter so as per the anatomical and physiological aspects of Pakwashaya mentioned in Ayurveda, if compared with modern anatomical structures then Pakwashaya represent entire part of large intestine i.e. From caecum to rectum.

Dalhan gives two types of Antra, these are sukshamtra and Sthulantra, and he explained the portion which is attached to the rectum is called as sthulantra, which must be the large intestine, and word Sthul itself denotes the portion is larger than another part,. As it hastwo types one is related with large intestine second must be small intestine and the word Kshudra and Sukshm also have the same meaning.

The organ Purishadhar, is named by the function of the organ that is to hold the faecal matter, Purish (Faecal matter) is from after complete process of Pakwa anna. Another terminology use by the Charka in same verse is Uttargud, which have the same function to hold the Faecal matter, and the word Adhargud, which has the function to expel the faecal matter, means this should be the last organ called as rectum. The organ, which is above the Adhargud, must be sigmoid colon, so Uttargud must be Sigmoid colon. As Purishadhar and Uttargudare the

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two term mentioned in same verse these must be the different organ, so per the function to hold the Purish or Pakwaanna, this organ must be the first part of large intestine i.e. caecum as caecum itself means blind sac, and from here apakwanna changes into Pakwaanna.

The Organ Unduk is well explained by Dalhan, he mentioned it as a Pottali (Sac) like, and is different than Pakwashaya, in modern science blind sac is refer for caecum so unduk also called as caecum.

Dimbha is the organ only mentioned by Vagbhat. Commentator Arundatta explained Dimbha in detail by anatomical and physiological view. He mentioned that the origin of the organ is same as intestine, and has a function as Aadhar of Shakrut means the organ which gives support to the faecal matter or act as a reservoir of this, both of these criteria resembles with sigmoid colon and the caecum. However, Vagbhat also mentions Unduk in same verse and the Acharyas cannot repeat same organ, so this organ must be the sigmoid colon

CONCLUSION

The word Antra is used in many texts, and the different terminologies related with the Antra is also used frequently by the Acharya. Pakwashaya, Purishadhar, Kshudrantra, Sukshmantra, Sthulantra, Uttargud, Unduk, and Dimbha are the terms used in place of Antra, it always create confusion that what exact part according to modern anatomy is consider at that particular time, so from above discussion based on location and function of the particular part mentioned by the Acharya's we can compare the Ayurvedic term related with modern anatomy as follows :-

Table No. 2 ayurvedic term related with modern anatomy

Ayurvedic term	Modern terminology			
Antra	Intestine			
Pakwashaya	Large intestine			
Purishadhar	caecum			
Kshudrantra,	Small Intestine			
Sukshmantra	Small Intestine			
Sthulantra	Large intestine			
Uttargud	Sigmoid Colon			
Unduk	caecum			
Dimbha	Sigmoid Colon			
	Pakwashaya Purishadhar Kshudrantra, Sukshmantra Sthulantra Uttargud Unduk			

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