

**THE PHYSIOLOGICAL STUDEY OF PURISH MALA W.S.R. FECES (STOOL)****Dr. Mukesh Saini<sup>1\*</sup>, Prof. (Dr.) Rajesh Kumar Sharma<sup>2</sup>, Dr. Dinesh Chandra Sharma<sup>3</sup>**<sup>1</sup>Ph.D. Scholar, P.G. Department of *Kriya Sharir*, Dsrrau, Jodhpur, Rajasthan, India.<sup>2</sup>Professor and H.O.D., P.G. Department of *Kriya Sharir*, Dsrrau, Jodhpur, Rajasthan, India.<sup>3</sup>Associate Professor, P.G. Department of *Kriya Sharir*, Dsrrau, Jodhpur, Rajasthan, India.**\*Corresponding Author: Dr. Mukesh Saini**Ph.D. Scholar, P.G. Department of *Kriya Sharir*, Dsrrau, Jodhpur, Rajasthan, India.

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**ABSTRACT**

Ayurveda gives special emphasis to Mala that is why it's included in trya aupstambha. Sharir is the basic thing through which the three purusharths mentioned in Ayurveda can be achieved, so it becomes essential to know the body composition. In Ayurveda the concept of formation of body is mentioned as "Dosha Dhatu Mala Mulam hi Shariram". That's why Ayurveda science has given vast detail of Purish (mala) like what should person eat (Ahara) according to his temperature, excretion of mala, time of defecation and consistency of purish according to diseases.<sup>[5]</sup> Dhatu creation is never without Mala creation. After every reaction or metabolism Mala is produced, therefore they regularly have to be taken care of; otherwise they cause ill effects in the body.<sup>[2]</sup> Feces, also spelled faeces, also called excrement, solid bodily waste discharged from the large intestine through the anus during defecation. Feces are normally removed from the body one or two times a day.<sup>[6]</sup>

**KEYWORDS:-** Purish, Mala, Dhatu, Sharir, Stool, Feces.**INTRODUCTION**

'Mala' is an entity which is nourished by 'Kitta by the action of Agni. Purisha mala is formed in Purishvaha strotas from this kitta. In large intestine about 1 lit. of slurry is delivered, where most of water, sodium, chloride, glucose and amino acid are reabsorbed. Here potassium is secreted and goblet cell secret mucus to lubricate the stool. Bacteria on intestinal flora produce Vit. K and Vit. B12 from this slurry. So initially Purish mala is functioning entity. It provides strength and support to Vayu, Agni and Pitta.<sup>[1,3]</sup> As per status of our body, age these Mala get replenished till they achieve their physiological measurement. They are produced in their quantities and qualities. This brings homeostatic condition in our body. When it becomes nuisance to body physiology, it should be excreted out; otherwise it will cause ill-effect.<sup>[1]</sup>

Once Purish Mala get affected, it develops symptoms in Purishvaha Srotas either with Purish Vridhi, Purish Kshaya and Sam Purish Lakshana. These vitiation are responsible for Mala pradoshaj Vikara. These lakshanas and Purish Parikshan is discussed here. This may prove useful in diagnosis of different diseases according to Ayurveda.

In Ayurveda, Dosha-Dhatu-Mala concept is important to understand the body functions. Malas are the metabolic end products those are to be excreted. Malas are divided

into two major parts that is Sharirika Mala (body wastes) and Dhatu Mala (metabolic wastes). Sharirika Mala is further classified into three parts that is Mutra (urine), Purisha (stool), and Sweda (sweat); and Dhatu Malas are further classified into seven types. Purisha comes under Sharirika Mala. Both Purisha and Mutra are formed from the food. After digestion, the Sarabhaga (nutrient portion) gets absorbed and the remaining undigested part becomes solid and that is called as Purisha. If Malas are not excreted from the body, the metabolic process will be impaired and this will ultimately lead to the formation of malformed tissues and diseases.<sup>[5,7]</sup>

Purisha is digested food in disguise of Mala remains in Pakwashaya. It is produced in its Purishwaha Strotas by Purishdharakala. From Purishdharakala if Purisha Mala is produced in extra amount because of any etiological factor, all other Dhatu Mala get affected<sup>1</sup>. Increased Purishmala increases quantity of Nasa, Netra Mala with special symptom Guruta.

In certain diseases, fasses may contain such substances which are not present normally in healthy individuals such as indigested food, mucus, parasites, intestinal calculi, pus, blood etc. According to Ayurveda Agni Vikruti causes diseases and Agni is responsible for formation of Kitta. So any Agni Vikruti leads to deranged formation of Purish Mala.<sup>[1]</sup>

**ETYMOLOGY OF PURISHA**

The word purisha is derived from dhatu malinikarnat.<sup>[8]</sup>

**SYNONYMS OF PURISHA**

Avaskara, Uchchara, kitta, dirt, Gutha, purisha, Purishana, varchas, Varchaska, Vishthhavoiding.<sup>[8]</sup>

**FORMATION OF PURISHA**

Purisha is the final excreta which is eliminable from the body after all the digestion, metabolism from the body after the digestion, metabolism process which is unable to transport into the circulating bio matter. In Ayurveda two specific and different channels or srotasa are defined in one common alimentary canal. With overall study of this grand srotasa i.e. alimentary canal in contemporary view performs multiphase digestion and metabolism commences from buccal cavity and terminates till rectum. The concept of pakvasaya is very specific in Ayurveda that does not deal with any small or large organ but largely resembles with large intestine. After two phase digestion of kapha in madhura avasthapak, pitta in amla avasthapak, the third and major metabolism of vata takes place in this portion. pakva- annarasa after a residual process of kapha and pitta formation enters into pakvashaya for expecting and analysing the rasa and mala with the help of samanvayu after the process of villous absorption of source bio matter, the remaining unabsorbed fluids and solid waste called aharmala is comprised of Muttra and purisha. Major fluids extracted as not useful waste matter coming out from mala dharan kala and form the urine for further filtration to respective organs. After extraction of liquid paripindita or solidified waste matter residue is called purisa but pakvasaya is the seat of third avasthapak i.e. katu avasthapak and katu bhava of this bio substance produce poshak vata. This purisha has a specific organ i.e. purisasaya or rectum to stay.<sup>[9]</sup>

**UTPATTI OF PURISHA**

After the intake of food the digestion of the food place with the help of jatharangi and panchabhutagni and that digested food is divided into two parts i.e. kitta bhaga and sara bhag again kitta bhaga is having two parts i.e. Drava bhaga is called as mutra Ghana bhaga is called as purisha or shakrut. According to Charaka: When the part of the food enters into the pakvasahya then it will become dry due to the presence of Agni and attain pindaswarupa. During this process due to katu rasa the vridhi of vayu takes place. paripindit pakvasya means, during the process of formation of mala or purish, the remaining food material which is waste will gate the pind roop and thus the purisha utpatti will occur.<sup>[10]</sup>

**PURISHA KARMA**

Avasthambha is function of purisha. avasthambha means shariradharan. purisha performs this karma till it is present in sharir. so properly formed purisha gives strength to body. Acharya sushruta has quoted that purisha performs vayu and agni dharan i.e. purisha gives strength to vayu and agni.<sup>[11,12]</sup>

**MUL (SITE) OF PURISHA**

Colon (Purishvaha srotas) is a site of formation and excretion of stool. Large intestine (Pakvashaya) and anal canal (Sthula guda) are root of colon.<sup>[13]</sup>

**PURISHAVEGA DHARANJANYA LAKSHANA**

According to Charkacharya, purishvegadharan causes pakvashaya shula, shira shula (headache), adhovata and purish apravartana (no passage of flatus and stool), pindikoveshtana (pain in calf region) and Adhmana. According to sushrutacharya, purishvegadharana causes Atopa, shula, parikartana (cutting type of pain in guda, basti), purisha Sanga (no passage of stool), Urdhvavata (frequent of belching), purisha Pravrutti from mukha.<sup>[14]</sup>

**CHARACTERISTICS OF NORMAL PURISHA**

Characteristics of normal stool in terms of physical characteristics such as Gandha (odor), Sparsha (touch), Varna (color), and Vaishadya (unstickiness/clear) are not described separately in the ancient and medieval period texts of Ayurveda, but stool examination has been given due importance in context of the diseases.<sup>[15]</sup>

**PRAMANA OF NORMAL PURISHA**

Pramana (quantity) of Purisha has been described by Acharya Charaka as Sapta Anjali Pramana.<sup>[16]</sup>

**JALA NIMAJJANA PURISHA PARIKSHA**

This is the only objective method which was used in ancient times to detect the presence of Ama in stool. Ama is considered as an important cause not only for the gastrointestinal disorders but also as the cause of many systemic diseases such as Jvara and Amavata. To detect the early presence of Ama, a special methodology was used that is Jala Nimajjana Purisha Pariksha. In this method, by observing the behaviour of stool, i.e., whether it sinks or floats in water is noted down. If stool sinks, it indicates the presence of Ama. If it floats, then Ama is absent in stool.<sup>[17]</sup>

**PURISH VRIDHI LAKSHANA**

Kukshishula- Pain in abdomen  
Atop – Gargaling noise in abdomen  
Gaurava – Heaviness in abdomen.<sup>[1,3]</sup>

**PURISHKSHAYA LAKSHANA**

Sashabda Vayu Kukshu TiryakUrdhwa bhraman- Movement of flatus associated with sound, moves in all directions haphazardly.  
Antra Vestana- Intestinal spasm  
Parshwa Hridaya Pida- Pain in the flanks and Heart.  
Alpata Shakruta- Quantity of stool is less.<sup>[1,2,4]</sup>

**PANCHBHOUTIK SANGHATAM OF PURISHA**

In Purish Mala, normally Agni & Vayu are predominant with Pruthwi Mahabhuta. Here Pruthwi Mahabhuta gives shape to Purisha. Agni & Vayu Mahabhuta gives little warmth to it, Yellowish colour to it, slight Katu Rasa & typical faecal odour to it. As Agni & Vayu Mahabhuta are in abundance, normal Purisha Floats on water. But as

the Purisha Mala becomes Sama Purisha due to Jatharagni Vikruti and Ama Nirmiti, its Panchbhautik Sanghatan changes.<sup>[18]</sup>

### SAMA PURISHA LAKSHANA

When Sama Purisha combines with Doshas; it manifests diseases accordingly.

Sama Purisha Apsu Awasidati – Sinks in water

Bhrusham Dourgandhi - Foul smell

Increases in quantity & frequency

Pichchila- Change in colour & consistency

Ejection of small quantity of Purisha with difficulty and sound.

Heaviness and pain in abdomen. Discomfort in Purishwaha Strotas.<sup>[2]</sup>

### SWAROOPA OF NIRAMA PURISHA

Vata dosha rahita, Durgandharahita, Person feel lightness after defecation Purish is panchabhautika and having Agni and Vayu mahabhuta predominance. Color of purish is yellow i.e. color of pakwa pitta. Rasa of purish is katu rasa Purish has got the particular bad odor.<sup>[2]</sup>

### SAMYAK MALAPRAVRUTTI

Though having mutrapravrutti without malapravrutti gas excreted, Agni becomes Pradipta, kostha become light.<sup>[10]</sup>

### PURISHDHARA KALA

This purishadhara kala is of fifth- This is in the anthakoshtha, between, last parts of laghwantra and starting part of bruhadantra known as unduka. Here the separation of rasa, mutra and purisha takes place. This fiction of separation is due to vata and Agni.<sup>[19]</sup>

### PURISHWAHA STROTAS DUSHTI LAKSHANA

Krushra malapravrutti- Patient passes stool with difficulty.

Alpalpa Mala Pravrutti- Passes little quantity of stool.

Sashabda, Sashula Mala Pravrutti Associated with pain and sound.

Ati-drava Mala Pravrutti- Passes excess watery stool

Sakapha Mala Pravrutti- Associated with mucus threads

Ati-grathita Mala Pravrutti- Sometimes hard stool.

Ati-bahu Mala Pravrutti- Passes large quantity of stool<sup>1</sup>.

### PURISHWAHA STROTAS VIDDHA LAKSHANA

Aanaha- Distention of abdomen

Dourgandhya- Foul smell of stool

Passes mucus threads in stool with tenesmus.

Grathitantrata- Intestinal obstruction or intussusception.<sup>[2]</sup>

### MALA PRADOSHAJA VIKARA

Agitated Doshas contact with Mala and cause breaking up of waste products or drying it up. Therefore Mala changes its normal colour, consistency, quantity, odour etc. Excessive retention of waste substances or excessive elimination of waste products indicates vitiation of Mala which results in disease manifestation.<sup>[1]</sup>

### PURISHA MALA PARIKSHA

According to Doshas, Mala Vitiated By Vata Shushka (Dry), Drudha (Hard), Krushna, Dhuma (Blackish in color), Trutitam (Clayey), Fenil (with air bubbles). Mala Vitiated by Pitta Ushna (Hot), Pitata (Yellowish in color), Raktawarna (Reddish), Drava (watery). Mala Vitiated By Kapha Shuklata (Whitish in Colour), Picchil (with Mucus), Sandra (sinks in water). Considering all above abnormalities in Mala, we can diagnose vitiated Dosh in different Mala Pradoshaj Vikar. While examining a patient, special attendance is to be given to Mala Parikshana as Mala is the basic entity of living body and maintain homeostasis when functioned normally.<sup>[20,21,22]</sup>

### DISCUSSION

In Ayurveda, Dosh-Dhatu-Mala concept is important to understand the body functions. Malas are the metabolic end products those are to be excreted. Malas are divided into two major parts that is Sharirika Mala (Body wastes) and Dhatu Mala (Metabolic wastes). Sharirika Mala is further classified into three parts that is Mutra (Urine), Purisha (Stool), and Sweda (Sweat); Dhatu Mala are further classified into seven types. Purisha comes under Sharirika Mala. Both Purisha and Mutra are formed from the food. After digestion, the Sarabhaga (Nutrient portion) gets absorbed and remaining undigested part becomes solid and that is called as Purisha. If Malas are not excreted from the body, the metabolic process will be impaired and this will ultimately lead to the formation of malformed tissues and diseases.<sup>[5]</sup>

Ayurveda considers Dosh, Dhatu, and Mala as foundation of the body. Mala is produced as a by-product of our daily activities. If Mala is not excreted from the body, the metabolic process will be impaired leading to the formation of malformed tissues. They are important for normal physiology of the body and each of them carries specific functions. Malas enable nutrition as well as the elimination of wastes from the body in terms of abnormalities in Varna (Color), presence of froth, consistency, Gandha (Odor), Sparsha (touch), Matra (quantity and frequency), and associated factors such as pain.<sup>[21]</sup>

Feces, also spelled faeces, also called excrement, solid bodily waste discharged from the large intestine through the anus during defecation. Feces are normally removed from the body one or two times a day. About 100 to 250 grams (3 to 8 ounces) of feces are excreted by a human adult daily.<sup>[6]</sup>

Normally, feces are made up of 75 percent water and 25 percent solid matter. About 30 percent of the solid matter consists of dead bacteria; about 30 percent consists of indigestible food matter such as cellulose; 10 to 20 percent is cholesterol and other fats; 10 to 20 percent is inorganic substances such as calcium phosphate and iron phosphate; and 2 to 3 percent is protein. Cell debris shed from the mucous membrane of the intestinal tract also

passes in the waste material, as do bile pigments (bilirubin) and dead leukocytes (white blood cells). The brown colour of feces is due to the action of bacteria on bilirubin, which is the end product of the breakdown of hemoglobin (red blood cells). The odour of feces is caused by the chemicals indole, skatole, hydrogen sulfide, and mercaptans, which are produced by bacterial action.<sup>[6]</sup>

Many diseases and disorders can affect bowel function and produce abnormalities in the feces. Constipation is characterized by infrequent evacuations and the production of excessively hard and dry feces, while diarrhea results in frequent defecation and excessively soft, watery feces. Bleeding in the stomach or intestines may result in the passage of blood with the stool, which appears dark red, tarry, or black. Fatty or greasy stools usually indicate pancreatic or small-intestine afflictions. Typhoid, cholera, and amoebic dysentery are among diseases spread by the contamination of food with the feces of infected persons.<sup>[6]</sup>

### CONCLUSION

Stool is an important by-product of the metabolism and reflects the changes occurring in the body in different pathological and diseased conditions. This purishadhara kala is of fifth- This is in the anthakoshtha, between, last parts of laghwantra and starting part of bruhadantra known as unduka. Here the separation of rasa, mutra and purisha takes place. Separation of mala is more in pakvashaya.

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