



Annavaaha Strotas Parikshan; Ayurved and Modern Perspective: A Review

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ABSTRACT

Communication of every element with each other, transportation of each *Bhava padartha* i.e body element, transformation of every element into different forms all these functions are carried out by millions of channels or pathways present in our body termed as *Strotasas*. *Annavaaha strotasa* is an essential *strotasa* as the major body function of digestion of food is carried out here. The conversion of food into *sharir dhatus* is initially carried out in *Annavaaha strotasa*. *Strotas-Parikshan* is seldom tool to procure detail knowledge about physiological and pathological state of any *strotasa*. It also helps to understand severity of the disease. This article specifically focuses on detail study of *Annavaaha strotas*, its pathological conditions. It also explains in detail the ayurvedic way that includes trividh pariksha, ashtavidh pariksha and examination from and modern point of view as well describing abdominal examination, lab investigations, etc.

Key Words: *Strotas, Annavaaha Strotasa, Trividh Parikshan, Abdominal Examination*

INTRODUCTION

Ayurveda is an ancient and holistic science, according to which *Purusha*, or the human body is made of these fundamental elements, the roots: *Tridosha, Saptadhatu, Trimala*¹. The communication of every element with each other, transportation of each element from one point to another, transformation of every element into different forms all these functions are carried out by millions of channels or pathways present in our body termed as *Strotasas*. Harmonious functioning of every *strotas* is very important for overall sound health. In 5th *adhyaya*,

StrotoVimana, Vimanasthana, detailed explanation of *Strotasas* is given by *Acharya Charaka*. Proper functioning of *strotas* depends mainly on its *moolsthana*. *Moolsthana* of any *strotasa* is its source of existence. It manifests in different ways. Some act as *utpattisthan* i.e. production centre and some act as *parikshan sthana* i.e. examination centre. Pathology of any *strotasa* can be studied with the help of *hetus, samprapti and lakshanas*. *Hetus* help to track down *samprapti* of the disease. *Lakshanas* act as examination parameters with the help of which *Vaidya* can examine the patient clinically. *Strotas-*



Parikshan is a seldom tool for a *Vaidya* to gain detail knowledge about *Strotasa*, *Vyadhighataka*, *Samprapti* of the disease related to it. It also helps to analyze the prognosis of the disease. In current scenario, changing food habits and diet, speedy life style is showing direct effects on GI tract and thus hampering the process of digestion.

Rachana sharir or anatomy of Annavaha strotasa: *Annavaha strotas* is a pathway that carries out transportation, digestion, absorption of food. According to modern medical science, it can be co-related with upper GI tract including mouth, esophagus, stomach and small intestine. The *moolsthana* of *Annavaha Stotasa* is *Amashaya*, *Vamparshwa* as per *Acharya Charaka*². *Amashaya* and *Annawahini Dhamanee* as per *Acharya Sushruta*³.

Kriya Sharir or Physiology of Annavaha Strotasa: Digestion of food is carried out on two levels a. *sthoala pachana* and b. *sukshma pachana*. The *Sthoala Pachana* is also called as *Avasthapaka* which is mainly carried out in *Annavaha strotasa*, the initial phase and in *Purishvaha strotasa*, the later phase. *Avasthapaka* is divided into three stages, a. *Madhur avasthapaka*- it commences from the time food is introduced into the mouth. This aspect of digestion in the upper portion of *Amashaya* is accompanied by *Madhura bhava*. This stage nourishes *Kapha Dosh*⁴.

b. *Amla Avasthapaka*- it is carried out in *Amapakwashaya* and is accompanied by *Amla Bhava*. This stage nourishes *Pitta dosha*⁵.

c. *Katu avasthapaka*- *Pakwashaya* is the site and this

stage nourishes *Vata dosha*. This is how the process of *avasthapaka* or *sthoal pachana* is explained⁶.

Pathology of Annavaha Strotasa:

The causative factors i.e. Hetus⁷

a. *Atimaatrasya Akaale bhojana*- over eating and untimely

b. *Ahita bhojana*- Unwholesome food that includes all junk and contaminated food, the consumed without following rules explained in *Ahaar Vidhi Visheshayatana*.

c. *Vaigunyaat Paavakasya*- any disturbance or vitiation of *koshthaagni* aka digestive fire.

Annavaha strotas Vyadhi: *Aruchi*, *Ajeerna*, *Adhmana*-*Aatopa*, *Chhardi*, *Visuchika*, *Alasaka Gulma*, *Shoola*, *Amlapitta*, *Krumi*, *Arshas*, *Grahani*.

Concept of Ama: While studying about *Annavaha strotasa*, *Ama* is an important aspect to consider. When the process of *Sthoal* and *Sukshma Pachana* is not carried out properly, it leads to saturation of undigested food in stomach, which is very toxic in nature. *Ama* has characters like, it is improperly processed, not properly bound, foul smelling, very viscid, causing body ache and weakness. It obstructs the *strotasas* and hampers the smooth functioning of body. It further mixes with vitiated *doshas*, or pollutes *Dhatu* or *Malas* causing various diseases.

Annavaha Strotasa Pariksha:

Ayurvedic Perspective:

Agni Pariksha: *Agni*, the digestive fire being the factor of *Annavaha strotasa*, the basic *pariksha* of *Annavaha Strotasa* is done by *Agni Pariksha*.



Agnipariksha is done by examining Digestive Capacity⁸.

Trividh Pariksha: Parikshan of any sharir bhava i.e. Rogi Pariksha is basically done by three steps 1. Darshana, 2. Sparshana, 3. Prashna⁹. Examination of Annavaaha strotasa with the help of these three pariksha can be done by assessment Strotodushti lakshanas explained by Acharya Charaka as given in table no. 1. Also, StrotoViddha Lakshanas i.e. signs of any puncture or injury to the strotasa explained by Acharya Sushruta as given in table no. 2 are useful parameters. There duration frequency and severity lead us to disease confirmation and its prognosis. **Ashtasthan pariksha:** Rugnapriksha with the help of Ashtasthan pariksha described by Acharya

Yogratnakara is another method of strotasa parikshana.

Table 1 Strotodushti lakshanas explained by Acharya Charaka²

Lakshana	Meaning
Anannabhilasha	Loss of desire to eat
Arochaka	Loss of Taste
Avipaka	Indigestion
Chhardi	Emesis

Table 2 StrotoViddha Lakshanas are explained by Acharya Sushruta³

Lakshana	Meaning
Adhmana	Bloating
Shoola	Abdominal pain
Anna vidvesha	Hate for food
Chhardi	Emesis
Pipasa	Thirst
Andhya	Blindness
Maranam	Death

These sites are Nadi, Mala, Mutra, Jivha, Shabda, Sparsha, Druk, Akriti¹⁰. Table no. 3 elicits remarkable pathological findings at few of the above sthanas.

Table 3 Asthasthana and their findings

Pariksha sthan	Findings
Nadi pariksha	Saamata-Niramta, specific organ pathology for eg. Grahani
Mutra pariksha	Saamata-Niramta.
Mala pariksha	Saamata-Niramta, constipation, loose stools, krumi, painful defecation, etc.
Jivha pariksha	Saamata-Niramta
Sparsh pariksha (Udara parikshan)	Akatan parikshan-dull and resonant sound in adhmana and udara vyadhi Shool or Sparshaasahatva in Udara

In Prashna Pariksha, Questionnaire given in table no. 4 can be used to detect the severity of Annavaaha Strotas Dushti,

Table 4 Questionnaire

QUESTIONS	YES	NO	15 days	30days	45days	60days	POINTS
Do you oftenly do over eating.							
Do you eat without hunger or eat untimely?							
Have you lost desire to eat?							
Do you feel food tasteless oftenly?							
Is the food you eat is digested properly							
Do you feel nauseated and tend to vomit oftenly?							
Do you feel bloated oftenly?							
Do you oftenly have abdominal pain?							
Do you oftenly feel thirsty?							

15days = 1point 30days = 2points 45days = 3points 60days= 4points

18 - 36 points = Severe Dushti; 9 - 18 points = Moderate Dushti; 0 - 9 points = Minor Dushti



Modern perspective:

Physical examination:

- I. Abdominal examination¹¹:
 1. Inspection:
 - a. Discoloration of any specific area of abdomen- Cullen's and Grey Turner's signs (bluish discoloration of the umbilicus and flanks, respectively) are related to intra-abdominal and retroperitoneal bleeding.
 - b. Abdominal distention: indicative of Obesity, distention due to Gas or Liquid, Ascites.
 - c. Abdominal Masses: malignancies of organs specified to particular quadrant, Splenomegaly, Hepatomegaly, Hernias, Hematomas, etc.
 - d. Visible intestinal peristalsis in intestinal obstruction.
 2. Auscultation:
 - a. Bowel sound excess- diarrhea
 - b. Bowel sound absent-paralytic ileus
 - c. Abdominal bruits- indicative of atherosclerotic plaques within abdominal arteries producing turbulent flow. Also due to abdominal artery aneurysm.
 - d. Rubs- rarely found over spleen or liver. Suggests chronic inflammatory changes in abdomen.
 3. Palpation and 4. Percussion:
 - a. Assessment of muscles guarding, muscle rigidity.
 - b. Palpation of intra-abdominal mass to rule out various differential diagnosis.
 - c. Palpation and percussion are both very important diagnostic criteria in Ascites, tests like

shifting dullness, fluid thrill are performed to know the fluid levels.

- d. Percussion is also useful to define liver size.

- II. Oral examination: oral signs indicative of diseases of digestive tract are as follows

- a. About 0.5-8% of Crohn's disease patients experience oral lesions, characterized as small sites of inflammation, or granulomas. Also, the patient may develop swelling of the lips, gums, and oral tissues causing difficulty eating¹².

- b. Erosion of tooth enamel in gastro-esophageal reflux disease.

Clinical investigations in Gastrointestinal system¹³:

Liver function tests: Serum creatinine (SCr) and blood urea nitrogen (BUN) are often used as a measure of hydration status, as well as useful as indicators for renal function. Elevations in SCr and BUN may be indicative of renal dysfunction or dehydration, and bleeding from the GI tract may lead to elevations in BUN. Albumin levels can be used to assess the patient's nutritional and hydration status and provide information concerning hepatic and renal function. Specifically, low albumin may indicate malnutrition, hepatic dysfunction, nephrotic syndromes, or protein-losing enteropathies such as Crohn's disease and ulcerative colitis. Serum measurements of sodium, chloride, and potassium are useful to determine electrolyte abnormalities associated with diarrheal illnesses. measurements of serum aspartate transaminase (AST) and alanine transaminase (ALT) are elevated in most diseases of the liver, and serum alkaline



phosphatase and bilirubin are often elevated in hepatobiliary disorders.

Diagnostic imaging techniques:

a. Plain and Contrast Radiography: primary diagnostic technique helpful to evaluate Abdominal Pain. Quick assessment of abdominal masses, esophageal strictures, stones, etc.

b. Ultrasonography (USG) and Computed Tomography (CT): very useful to examine deeper abdominal organs.

c. Magnetic Resonance Imaging: more sensitive than USG and CT to malignancies.

Endoscopy: Useful for diagnostic evaluation in upper GI bleeding, obstructions, upper abdominal pain, persistent vomiting, and radiographic abnormalities.

CONCLUSION

a. Human body consists of millions of channels and pathways and they carry various *bhava padartha* from one point to another. These channels are called *Strotasa*.

b. Food is amongst the basic needs of life. It is a fuel for survival. *Acharya Charaka* also has included it in *Trayopstambha*, the three pillars of life. *Annavaha strotasa* as its name suggests is a shelter of food and plays an inevitable role in Transformation of Food to Life. So, the well-being of this *strotasa* is highly essential. *Strotasa parikshana* has its role in examining the same.

c. *Annavaha strotasa parikshan* can be done by evaluating *annavaha dushti lakshana* and *viddhalakshanas* with the help of various techniques and questionnaire mentioned earlier.

Ashtasthan pariksha helps in understanding the anatomical as well as physiological derangement.

d. Modern methods and techniques of examination can be correlated with ayurvedic contexts like *akotan pariksha* of *udara* and percussion of abdomen.

e. There still stands a scope for research, to use diagnostic imaging techniques for understanding *Annavaha strotodushti* from Ayurvedic Perspective, or to correlate their interpretations with ayurvedic view.



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