

Review Article

Conceptual study of pathophysiology and pharmacological effect of Saptamrit Louha in approach to Soola

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ABSTRACT

Anndrvashoola and Parinamshoola briefly described by acharya Vijayrakshitand Kanthdatta on Madhukosh in shoola Nidanam 26th chapter, mainly vata dosha is responsible for that disease. In Anndrvashoola continuous pain in abdomen, pain present before meal and relief in pain after vomiting in Parinamshoola, aadhman, aatop, arti, kamp and pain relief by consuming greasy and worm food. In modern science, according to sign symptoms we correlated with peptic ulcer. Main cause is *H. Pylori*, NSAID, stress, smoking, steroid either duodenum or stomach ulcer in ratio of 4:1. The peak incidence of duodenal ulcer is 5th decade while for Gastric ulcer is 6th decade and "O" blood group persons are more prone to develop duodenal ulcer. To treat this disease Vranropan and Shothhara chikitsa is very important for that this drug should have properties like Dahaprashmana, Amashayakshata sandhan, Pittashamak, Amlatanashak, shothhara due to those action Saptamrit Louha play effective role in Shoola. Considering above factor SAPTAMRIT LOUHA is chosen in management of shoola. Later on, I will have explained how Saptamrit Louha works on Anndrvashoola and Parinamshoola at the time of presentation.

Keywords: Anndrvashoola, *H. Pylori*, NSA ID, Parinamshoola, Peptic ulcer, Saptamrit Louha

INTRODUCTION

Annava strotas is correlated with digestive system in modern science. The moola of annava strotas is Amasaya and vamparshava, amashaya is well known as stomach Acharya chakrapani also said Mansashaya. Ayurveda is based on Tridosas sidhant this is the back bone of the Ayurveda. Vata dosas if mainly found in Pakwashaya, Pitta is found in amashaya and Kapha is mainly found in Uttar Pradesh. Pitta is also correlated with Agni. Acharya charak mention four type of Agni likes Samagni, Durbalagni, Tikshanagni and Vishamagni.¹ In Annava strotas disease depends on Agni. Today in modern life style busy schedule, luxuries

life, over work load as well as polluted air and water these all are factors of disturbing in Dincharya over production of gastric juice and lack of food intake resulting the formation of ulcer. When the ulcer found in stomach known as gastric ulcer and when ulcer found in duodenum known as duodenal ulcer both ulcer is combine known peptic ulcer.² In Ayurveda peptic ulcer is correlated with Annadrava soola and Parinam soola. The main cause of soola is Ruksh, sheet, ushana, katu, Lavanyukt aahar, virudha aahar-vihar, Ratrijagran, Vega dharan, Atimaitihuna, Bhaya, Krodha and resulting, pain in abdomen before meal, continuous pain in abdomen and relief in pain after vomiting in Annadrva soola and aadhman, aatop, mal-mutra atipravriti, arati, kamp, relief

in pain in consuming warm food stuff in Parinam soola. These are acute or chronic ulcer in any part of the GIT caused by combined action of hydrochloric acid and pepsin.³ In modern science main causative organism for peptic ulcer is *H. Pylori* infection and prolonged heavy dose of NSAID, resulting inflammation and ulceration in inner mucosal membrane of stomach, stress, smoking, steroids, prolonged empty stomach.⁴ Saptamrit louha is described by Bhaisjyarnawali for the management of Parinam soola and Annadrava soola because the Vranropan, Amlatanashaka, sothahara, pittashamak properties of this preparation.⁵

Aim and objective

- To conceptual study of the effect of Saptamrit Louha in management of soola
- To study the detailed about soola (Anndrava soola and Parinam soola).

Incidence

Peptic ulcer is the area of degenerative and narcosis of gastro intestinal mucosa exposed to acid-peptic secretion. The ratio between duodenum and gastric ulcer 4:1. Peptic ulcer is more frequent in middle aged adult. In peak incidence for duodenal ulcer is 5th decade while for gastric ulcer is 6th decade. Duodenal as well as gastric ulcer are more common in male then female. In overall incidence of gastro duodenal ulcer being approximately 10% of the male population.⁶ Blood group ‘O’ and non-secretor of ABO blood group in the saliva are two and a half times more prone to develop duodenal ulcer.³

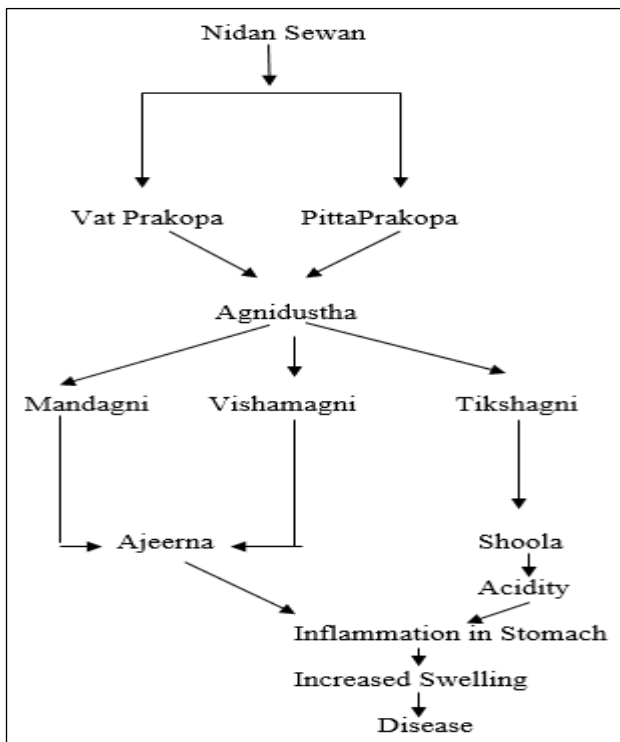


Figure 1: Samprapti Chakra.⁴

Etiology

The immediate cause of peptic ulcer disease is distributions in normal protective mucosal barrier by acid pepsin, resulting in digestion of the mucosa. Thus, the etiology of peptic ulcer is Septicemia, drugs, burn, physical or mental trauma, operation of brain, anorexia, stressful condition, possibly may not be the beside of a singal factor but is multi-factorial.³ These factors are as under:⁶

Helicobacter pylori gastritis

About 15-20% cases infected with *H. pylori* in the antrum develop duodenal ulcer in their life time while gastric colonization by *H. pylori* never develop ulceration and remain asymptomatic. *H. pylori* can be identified in mucosal samples by histological examination, culture increased activity and serology.⁶

Acid-pepsin secretion

There is conclusive evidence that some level of acid-pepsin secretion is essential for the development of duodenal well as gastric ulcer. peptic ulcer never occurs in association with pernicious anemia in which there are no acid and pepsin- secreting parietal and chief cells respectively.⁶

Mucous secretion

Any condition that decrease the quantity or quality of normal protective mucous barrier predisposes to the development of peptic ulcer.⁶

Psychological factor

Psychological stress, anxiety, fatigue and ulcer type personality may exacerbate as well as predispose to peptic ulcer disease.⁶

Local irritant

Pyloric antrum and lesser curvature of the stomach are the sites most exposed for longer periods to local irritants and thus are the common sites for occurrence of gastric ulcer. Some of the local irritating substance implicated in the etiology of peptic ulcer are heavy spiced food, alcohol, cigarette, smoking, unbuffered aspirin, non-steroidal anti-inflammatory drugs etc.⁶

NSAID

Non-steroidal anti-inflammatory drug inhibition of enzyme cyclooxygenase-1 (COX-1) which is important for formation of protective prostaglandins in stomach. In old classics soola is divided into two types:⁴

- Anndrava soola

- Parinam soola: Further sub divide in 7 types according to dosas⁷
 - a) Vata
 - b) Pitta
 - c) Kapha
 - d) Vata-Pitta
 - e) vata-Kapha
 - f) Pitta-Kapha
 - g) Sannipataj

Symptoms of Anndrava soola:⁴

- Pain in abdomen before meals or during digestion or any time
- Continuous pain in abdomen
- Relief in pain after vomiting
- Pathyaapathya is not use full.

Table 1: Symptoms of Parinam soola.⁴

Vataj Shoola	Pittaj Shoola	Kaphaj Shoola
Adhman	Trishana	Chardi
Aatop	Daha	Hallas
Mala-Mutra Atipravatti	Bechaini	Murcha
Arati	Swdadhikya	UdaraShoola
Kamp	-	-

Pathological changes

Gross and microscopic changes in gastric and duodenal ulcer are similar and quite characteristic. Gastric ulcer is found predominantly along the lesser curvature in the region of pyloric antrum more commonly on the posterior then the anterior wall. Most duodenal ulcer are found in the first part of duodenum, usually immediate post-pyloric, more commonly on the anterior then the posterior wall, uncommon location include ulcer in the cardiac, marginal ulcer and in the Meckel's diverticulum.⁶

Grossly, typical peptic ulcer is commonly solitary (80%) small (1-2.5 cm in diameter) round to oval and characteristically punched out. benign ulcer usually has flat margins in the level with the surrounding mucosa. The mucosal fold converges towards the ulcer.

The ulcer may vary in depth from being superficial to deep ulcer. In about 10-20% of case gastric and duodenal ulcer are coexistent. Vast majority of the peptic ulcer are benign chronic duodenal ulcer never convert into malignant, while chronic gastric ulcer may develop carcinoma in less 11 then 1% of case. Malignant gastric ulcer is larger bowl-shaped with elevated and indurate mucosa at the margin. Microscopically chronic peptic ulcer has 4 histological zones:⁶

- Necrotic zone: Lies in the floor of the ulcer and is composed of fibrous exudates containing, necrotic debris and a few leucocytes⁶
- Superficial exudative zone: Lies in the underneath the necrotic zone. The tissue element here shows coagulative necrosis giving eosinophilic, smudgy appearance with nuclear debris⁶
- Granulation tissue zone: Is seen merging into the necrotic zone. It is composed of nonspecific inflammatory infiltrate and proliferating capillaries¹²
- Zone of cicatrizations: Is seen merging into thick layer of granulation tissue.⁶

Treatment protocol's

Firstly, in the management of soola we need to do Nidan parivarjan like mithya aahar-vihar. All thing's should be avoided especially in Anndrava soola Pittant Vamana and Kafant Virechana should be done and in Parinam soola firstly we done Langhan karma, then vamana, virechan by Tikta drvya after that Basti karma done for relief the pain.⁴

Table 2: Role of saptamrit louha in shola.⁵

Drug name	Botanical name	Action
Haritaki ⁸	<i>Terminalia chebula</i>	Shoth-hara, Vedna-sthapana, Vrana Ropan, Deepan-Pachan
Vibhitaki ⁸	<i>Terminalia bellirica</i>	Soth-hara, Deepan Pachan
Aamlaki ⁸	<i>Emblia officinalis</i>	Tridosh Shamak, Dahaprashamana Amlatanashaka
Mulethi ⁸	<i>Glycyrriza glabra</i>	Amashayamlata nashak, Amashayik Kshat-Sandhanak, DahaShamak, Pitta-shamak, Chardi-Nigrahan
Louha ⁵	<i>Iron</i>	Raktvardhaka, Tridosh-shamak, Agnideepak, Sadhya-shoolahara ¹⁸

Complication⁷

Aacharya Vijayrakshit mention in Madhukosh complication of soola they are following:

- Vedna
- Murcha
- Gourava
- Kasa
- Hikka
- Trishna
- Aanaha
- Aruchi
- Swasa.

Table 3: Pathaya (Do).⁴

Aahar	Vihar
Laghu aahar, Puran shali Chaval	Vaman, Virechan, Basti
Sawan, Kodo, Sattu	
Matter Dala, Yush Lava	
Go-dughdha, Aanup-Jangal Mans Rasa, Nariyal Pani	

Table 4: Apathaya (Don't Do).

Aahar	Vihar
Guru, Shuskha, Vidahi, Shuskh Saka	Ratri Jagrana, Dhoosa sewan
Mirch-Masala, Sarson Taila	Upwasa
Rai, Katu-Tikshana dravya, Amliya padartha	
Fish, Madyapana, Kulatha dala, Raice	

RESULTS

In modern era sedative life style, over work load, luxurious life, junk food, imbalance food all above factor over production of gastric juices resulting acute or chronic ulcer in stomach or duodenum. Acharya Vijayrakshit and Kanthdutt mention detailed explanation about soola in 26th chapter Soola nidanam in Madhavanidan. Mainly vata dosh is responsible for this disease.⁵

Acharya charak also described in Charak chikitsa 19th Atisar chapter in concept of Agni.¹ They clearly followed the line of treatment vaman, virechana, basti. Drug Saptamrit Louha have sothahara, Vranropan, Amlatanashak, Pitta shamak, Amashaya kshat sandhan properties which is very useful in treatment of ulcer.⁴ Mainly this disease is occur in 5th and 6th decade of life so that burning issue of this disease Saptamrit louha play safe and effective role to cure the disease.⁶

DISCUSSION

Due to all etiological factor resulting an ulcer found in stomach and duodenum. For the management of soola

Saptamrit louha is chosen its ingrediants like Haritaki, Vibhitaki, Amlaki, Mulethi, Louha all above drug have properties like Sothahara, Vranropan, Pitta shamak, Amlatanashak, Amashayik kshat sandhan.⁸ They are very important properties for healing the ulcer and relief for pain. Louha bhasma are mentioned Pitta and Kapha dosas also coolant in nature Rakt-dhatu Vridhikar and heavy to digest.⁸ Damage of inner mucosal membrane resulting the vitamin B-12 can't absorbed properly which are leading cause of pernicious anaemia, so that this preparation is also use full in pernicious anemia as well as peptic ulcer.³

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