



ORIGINAL RESEARCH PAPER

Ayurveda

NAGARADI UTKARIKA IN THE MANAGEMENT OF PARINAMA SHOOLA – A CRITICAL REVIEW

KEY WORDS: *parinama shoola, peptic ulcer, nagaradi utkarika*

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ABSTRACT

Parinama Shoola (Peptic ulcer disease) is a chronic, relapsing and non-fatal GIT conditions that constitute 25% of the patient's visits to clinics and hospitals in India². *Samprapti of Shoola* starts with intake of *Viruddhahara* like hot and spicy rich fatty diet, junk foods, addictions like tobacco chewing, smoking, alcohol and physical inactivity, mental stress leading to *Agnimandya* and formation of *Ama*, which trigger a progressing chain of events i.e. *Ajeerna* followed by *Amlapitta* (hyperacidity) and finally culminating into *Shoola*³. In Ayurveda *Vata, Pitta* or both are explained as causative factor of *parinama shoola*. So the drugs which are *Vata, Pitta shamaka* property will be useful. *Nagaradi utkarika* explained in *Chakradatta - parinama sooladhikara* contains *nagara, thila and guda* prepared in *ksheera* and mentions as if administered for 7 days will cure chronic *parinama shoola*⁴. On analyzing *rasadi panchaka* of the constituents from review of literatures available *Snigdha guna* and *madhura vipaka* of all constituents and *grahi guna of nagara, vrana hara property of tila* may be the cause of its *vathapitha samaka* and *vyadhi harathwa* property in *parinama shoola*. Easily available constituents makes this yoga unique with a promising outcome.

INTRODUCTION

Parinama shoola or duodenal ulcer is a very common disorder owing to stressful life. Because of westernization of food, habits and culture, individuals are prone to develop this condition. It is chronic disorder approximately 25 million Indians are suffering from peptic ulcer disease at point in their lifetime. Duodenal ulcer are 5 to 10 times more common than gastric ulcer, the incidence for duodenal ulcer is 30-60% the male and the female ratio is 3:1 the incidence of gastric ulcer is usually 50% and over. It affects male and female in the ratio of 2:1 each year. Its prevalence in India particularly south India is quit high.

Parinama shoola is a disease of *Annava hasrotas* characterized by pain during digestion of food and source of constant discomfort¹. The common sites of pain include *kukshi* (Epigastric region), *Jathara-Parshva* (Right and Left Hypochondria), *Nabhi* (Umbilical region), *Basti* (Hypogastric region), *Stanantra* (Retrosternal) etc. *Parinama shoola* is a *Durvigneya* (difficult to manage) and *pitta pradhana tridosaja vyadhi* characterized by pain during digestion of food. *Madhavakar* has mentioned the *prakopa of vatha* by *svanidana* is followed by involvement of *pitta* and *kapha*, therefore, the factors provoke *vata* can be included in the aetiology of *Parinama shoola*. These include various faulty dietary habits, faulty exercise and deliberate retention of urges, *Kshobha, Trasa, Shoka* and *krodha* etc are the causative factors play role in the production of *shoola roga*. *Shoola* is the presenting and the most troublesome symptom in all the disease of *Annava hasrotas*.

Modern aspect of peptic ulcer can be explained as imbalance between the aggressive (ac bile etc.) and the defensive (gastric mucus and bicarbonate secretion, prostaglandins, nitric oxide, innate resistance of the mucosal cells) factors, a bacteria in the stomach called *H. Pylori* spiral-shaped bacterium that lives in the acidic environment of the stomach. Research conducted revealed the presence of this bacterium in almost 92% cases of duodenal ulcers and 73% cases of gastric ulcer³. Over medication like NSAIDs, alcohol, cigarette smoking habits, poor functioning of pylorus sphincter causing reflux of bile are the etiological factors. O blood group, Stress has been implicated in predisposing duodenal ulcer. Patients usually develops periodic epigastric pain, especially hunger pain. Epigastric pain during night hours awakens the patient from sleep. Spicy, fried & hard to digest food are aggravating factors. Heart burn, nausea, loss of appetite & vomiting are the other features. Pyloric stenosis

due to fibrosis of repeated ulcers & malignancy (rarely) are the complications of duodenal ulcers. Endoscopy (gastroduodenoscopy) is the chief investigation in the diagnosis of duodenal ulcer. CLO test is to determine the presence of *H. Pylori* infection. As recurrence of the ulcer is quiet common even after surgery, an effective Ayurvedic formulation has a great role.

Nagaradi utkarika explained in *Chakradatta - parinama sooladhikara* contains *nagara, tila, guda* along with *ksheera* and described as it has got the potency to cure even chronic *parinama shoola* with in 7 days. The reference Sloka (verse) is sited below⁴ *Nagaratilagudakalkam payasa samsadhya ya pumanadhyath | Ugram parinamathishoolam tasyapyathi saptharatrena ||* Combination of *nagara* with *tila* is also mentioned in *amavtha chikitsa* of *bhavaprakasha*

AIMS & OBJECTIVES:

To analyse "nagaradi utkarika" and its mode of action in *parinama shoola*

METHODOLOGY

The study was done by in depth literature survey through various Ayurveda classical text books like *Carakasamhita, Susruta samhita, Ashtanga hridaya, bhavapraksha* and various journals, articles. Review mainly focused on the pharmacological properties of each ingredient in modern as well as Ayurvedic perspective.

RESULTS AND DISCUSSION

The mode of action of a formulation depends on *rasadi panchaka* of its ingredients botanical identity, part used, *rasapanchaka*, chemical constituents, pharmacological properties of each ingredients analysed.

Table 1: Botanical identity and part used of each ingredients of nagaradi utkarika

Sl. No	Ingredients	Botanical name	family	Part used
1	Nagara	Zingiber officinale	Zingiberaceae	rhizome
2	Tila	Sesamum indicum Linn	Pedaliaceae	Seeds, oil
3	Guda	Saccharum officinarum	poacea	
4	Ksheera			

Table : 2 Pharmacological researches on each ingredients

Ingredients	Botanical name	Chemical constituents	Pharmacological Properties Reported
Nagara	Zingiber officinale	Zinngiberines Zingiberol Geraniol Gingerdiol Gingerone	Antihelminthic, anti oxidant, tissue protective, PGA synthetase inhibitor
Tila	Sesamum indicum Linn	Fixed Oil, Neutral lipids, glycolipids, sesamose, sesamolins, sesamolins	Antioxidant, Hepatoprotective, Antitumour, Hypotensive
Guda	Saccharum officinarum	, sucrose (65-85%), invert sugar (10-15%)	Haematenic,maintains acid balance in cells, strengthens nerves
Ksheera		Water, Carbohydrate, Protein, Fat, Enzymes, Vitamins & minerals	anti tubercular activity and have the properties to cure emaciation, injuries.

As per Ayurveda principles, pharmacological actions of a drug can be inferred through Rasadi pancaka and classical categorization of drugs

Table 3:Pharmacological properties in Ayurvedic perspective^{5,6,7}

Name	Grouping	Rasa	Guna	Viry a	Vipak a	Karma	Vyadhi karma
Nagara	Pippalya di gana, Trikatu Panchakola Harithavarga Dipaniya, Sulaprasamana	Katu	Laghu Snigdha Thikshna	Usna	Madhura	Vatha kapha hara, Sopahara, Samgrahi, pachana, Kandamayaharam Vibandaharam Soolaharam	Gulma, grahani athisara, amavaha,
Tila	Pureesha virajaneeya, swedopaga, dhanya varga	Kashaya, Madhura, Thikta and Katu	Guru, svadhugrahi Vyavayin, Guru, Snigdha, Sukshma	Ushna	Katu	Vata hara grahi, vata ghna, agnimathipretha, vrenahitha, Vrana Dahana shaka, Vrana Samshodhaka	Vataroga, grahani agnimandhya,
Guda	Ikshuvarga	madhura	Snigdha, sara	seetha	madhura	Sleshmakrut, vathapithaghna agnidepanam arukprasadanam,	Vrushyam, vatharoga

Ksheera	Ksheera	madhura	Snigdha, sara	seetha	madhura	Vatha pitha hara, San dhanakara ka jeevanam, balyam, ovardhana	Sula, udavarta, gulma, grahani, ,,
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Mode of action

Mode of action of *nagaradi utkarika* can be explained only on the basis of *rasadi pancaka* of its ingredients. *nagaradi utkarika* is a formulation explained for the management of *parinama shoola*. Description about the Combination of *nagara* with *tila* can be also visible in *amavatha roga chikitsa of bhavaprakasha samhitha*. In both these cases *shoola haratha* property of this combination made it effective. When analyse the case of *nagaradi utkarika* in *parinama shoola*, most of the ingredients has got *madhura thiktha rasa, seetha veerya, madhura vipaka, vathapithagna* properties and *shoola harathwa, sophahara* property of *nagara* and *tila* along with *vraane hitha, deepana, grahani hitha* property of *tila, vatahpathaghna, arukprasadanana*, property of *guda, sandhana kara, balya, sula hara* of *anupana ksheera* plays an important in

the treatment of *parinama shoola*. Most of the ingredients plays an important role in maintaining the balance between the aggressive (ac bile etc.) and the defensive (gastric mucus and bicarbonate secretion, prostaglandins, nitric oxide, innate resistance of the mucosal cells) factors. Jaggery with its high magnesium content boosts intestinal strength and reduce acidity. Milk with its high calcium content prevents acid build up and provide a temporary coating for intestinal mucosa. As *ksheera* is used in small quantity as *anupana* it helps in healing and provide an environment for prostaglandin enhancing property of *tila, nagara*, antacid property of jaggery which may be the exact mechanism of the action in *parinama shoola*.

Samprapthi vighatana of Parinama shoola

Nagaradi utkarika predominantly is *katu, thiktha rasa, Shita in Virya and Madhura in Vipaka*. it removes *kapha* and *pitha avarana*, and *vatha samana*. *Tiktha rasa* and *madhur vipaka* shows *deepana* and *pachana* action which leads to *agnivrudhi*, it causes *samyak* formation of *ahara rasa* and *sapthadathu* which leads to *ojovrudhi*. *ksheera* also improves *ojus*

CONCLUSION

Most common cause of ulcers according to Ayurvedic aspect is *vata* and *pitta* or both together along with *kapha avarana*. So to treat the ulcer we need the drugs which pacify both *vata* and *pitta* and remove *kapha avarana* and *agnideepana*. or drugs which are *katu thiktha rasa pradhana Shita* in *Virya* and *Madhura in Vipaka*. *Nagara* and *tila* are having *agnideepana*, and *kapha hara* property *guda* and *ksheera* are *Shita* in *Virya* and *Madhura* in *Vipaka* and *vatha pitha samaka*. *Ksheera* has ulcer protective effect, it also increases mucous secretion so prevent the mucosal lining of stomach and at last it has antibacterial effect which helps in combating the adverse effect of *Helicobacter pylori* which is most common cause of ulcer. Similarly *guda* is antacid and mucous secreting, so *nagaradi utkarika* is very helpful in treating the peptic ulcer.

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