

A REVIEW OF GUNMAM (ACID PEPTIC DISEASE) IN SIDDHA SYSTEM

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ABSTRACT

Siddha Medicine is one of the ancient traditional medical systems of the World. According to Siddha system human body is made up of five elements (Fire, Water, Air, Earth and Galaxy). The human body runs on the basis of vatha, pitha and kapha. Due to changes in the equilibrium of tri-dosha, mankind acquire diseases. The great Siddhars like *Agasthiyar and Yugi muni* classified the human diseases into 4448 types of disease. Out of these diseases, some clinical conditions gain importance in terms of severity, Recurrence, level of the involvement of morbidity & mortality etc. In that way, Acid Peptic Disease (APD) known as Gunmam in Siddha, is named after its character of inducing severe stomach pain to the patients to the extent that the patient usually assumes a bent forward position in order to get relief from the pain. This review paper gives a complete overview of its definition, types, clinical features and management as per the Siddha Science.

Keywords

Gunmam in Siddha, Acid Peptic Disease, Siddha Herbs, Medications for Gunmam.

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INTRODUCTION

India is the largest producer of medicinal herbs and is called as botanical garden of the world. The current review focuses on herbal drug preparations and plants used in the treatment of ulcer in the world. The use of Siddha medicines is common in both adults and children and is increasing in many areas of the world. Gastric ulcer is one of the most prevalent gastrointestinal disorders, which affects approximately 5-10% of people during their life. In recent years, many works has been carried out in herbal medicine to clarify their potential efficacy in gastric ulcer prevention or management. Peptic ulcer disease encompassing gastric and duodenal ulcer is the most prevalent gastrointestinal disorder. The Patho-physiology of peptic ulcer disease involves an imbalance between offensive (acid, pepsin, and *H. pylori*) and defensive factors (Nitric oxide, Bicarbonate, growth factors, Prostaglandin and Mucin). Indian Medicinal plants and their derivatives have been a valuable source of therapeutic agents to treat various disorders including Antiulcer diseases

Gunmam in Siddha

"Vatha bantha thonthamilathu Gunmam varathu"

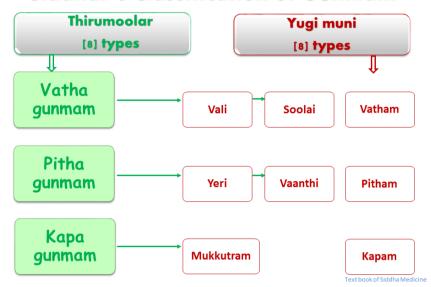
The patient suffering from this disease will lean forward due to pain. Hence it is named as Gunmam. The other name for *Gunmam* in Siddha is Gulmam. The common features of this disease are indigestion, stomach irritation, vomit, decrease in body weight, loss of confidence. It is caused due to consumption of very hot food stuffs, gastritis inducing foodstuffs, water mixed with limestone, high consumption of coconut milk, stress, adequate temper, starvation and insomnia. According to Siddha system the Gunmam is classified into 8 types.

Types of Kunmam

- 1. Vaayu kunmam
- 2. Vaatha kunmam (Related to ectoderm)
- 3. Pitha kunmam (Related to bile, endoderm)
- 4. Eri kunmam (Related to gastritis)
- 5. Vali kunmam
- 6. Satthee (Vaanthi) kunmam (Related to more nausea)
- 7. San-nee kunmam (Related to tri-dosha)
- 8. *Iya kunmam (Related to phlegm, mesoderm, kapha)*

Classification of Ulcer as per Siddha Literature

Siddhar's Classification of Gunmam



Mechanism of Ulcer

Risk factors*, Helicobacter pylori

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Hyper secretion of hydrochloric acid and pepsin

 \downarrow

Imbalance Between gastric luminal factors

1

Degradation in defensive function of gastric mucosal barrier

 \downarrow

Histamine is released when acid and pepsin invade a weakened area of mucosal barrier



Histamine stimulate parietal cells to secrete more acid



Continuation of vicious cycle, erosion



Ulcer

Risk Factor

- 1. Starvation
- 2. More use of NSAID
- 3. Smoking Habit
- 4. Stress due to psychological problems
- 5. Intake of caffeine
- 6. Alcohol intake

Table 1.1 The signs and symptoms of these types of Gunmam

VAAYU KUNMAM	VAATHA KUNMAM	PITHA KUNMAM
Indigestion	Stomach pain	Irritation and mucous along
		with vomit
Vomiting	Weight loss	Giddiness
Weight loss	Inability to walk	Weight loss
Inability to walk	Constipation	Constipation
More sweating	Malaise, Tiredness	Blood becomes impure
		and the body colour
		changes into yellow
Stomach cramps	Headache	Thirstiness
Tiredness of leg	Xerostomia	Hyperthermia
Aversion over food	Blackening of body skin	Eye irritation
Sensation of stomach	Blood vomiting	Headache
gases roaming like a ball		

ERI KUNMAM	VALI KUNMAM	SATTHEE KUNMAM	
There will be irritation	Indigestion	Vomit due to indigestion	
after a few minutes			
having food			
Salivation of mouth will	Weight loss	Giddiness	
be more			
Head ache	Loss of confidence	Irritation of stomach	
Stomach enlarges more	Insomnia	Constipation	
There will be sweating on	Aversion over food, Fever	Inability to walk, Loss of	

the hairs of leg		strength, Malaise.
Weight loss	Pain at vertebra and wrist	Veins emerges to the
	joint	surface of skin

SANNEE KUNMAM	IYA KUNMAM
Enlargement of stomach	Aversion over food
Giddiness	Sadness along with reduce in body weight
Sensation of burning on chest	Body becomes pale
Body becomes cold	Giddiness
Faces will be hot	Sensation of burning on chest
Sensation of saltiness in mouth	Trembling

Table 1.2. Herbs Used for Ulcer Classified as per Siddha Materia Medica.

Tamil name/	Botanical	Parts Used	Actions	Uses in Siddha
Common name	Name/Family			
Seeragam/ Cumin	Cuminum	Seeds	Carminative,	Gut motility
seeds	cyminum/ Apiaceae		stimulant,	disorders, kidney
			stomachic,	stones
			astringent	
Masikkai/ Magic	Quercus infectoria /	Seeds	Astringent, styptic,	Venereal disease,
nuts	Fagaceae		tonic	fever, menorrhagia
Abini/ Opium	Papaver somniferum	Latex, seeds	Demulcent,	Otitis, insomnia,
poppy	/Papaveraceae		nutritive, astringent	
Punnaikaali	Mucuna pruriens /	Seeds	Nervine tonic,	Leucorrhea, cholera
/Common cowitch	Fabaceae		aphrodisiac,	
			astringent	
Yelam/	Eletaria	Dried fruit	Stomachic,	Cough,
Cardamom	cardamomum /		Carminative,	Diarrhoea,
	Zingiberaceae		Stimulant.	Phelgm, Dysuria,
				Oligospermia,
				Peptic Ulcer
				Diseases (PUD)

Milagu/ Pepper	Piper nigrum /	Dried fruit	Carminative,	Fever, Anaemia,
	Piperaceae		Antispasmodic,	Phelgm, Piles,
			Digestive,	Dyspepsia,
			Expectorant,	Cough, Loss of
			Laxative, Acrid,	Taste
			Anthemlmintic,	
Brahmi	Bacopa monnieri /	Fresh Juice	Tonic, diuretic,	headache,
	Scropulariaceae		mild sedative,	asthma,
			antioxidant	bronchitis,
				arthritis
Palasu/ Flame of	Butea monosperma /	Seeds	Astringent, tonic,	Itching, GIT
the forest	Fabaceae		aphrodisiac,	disorders
			diuretic,	
			anthelmintic	
Chukku	Zingiber officinale	Dried rhizome	Stimulant,	Cough, Asthma,
	/ Zingiberaceae		Carminative,	Dyspepsia, Fever,
			Stomachic,	Anaemia,
				Sinusitis
Aloe	Aloe vera/	Leaf	Coolant, tonic,	Dysentry,
	Xanthorrhoeaceae		anthelmintic,	Psoriasis,
			alterative	eczema, burn

Table 1. 3. Medicines Used for specific types of Gunmam

VAATHA	PITHA GUNMAM	
GUNMAM		
Sembu parpam	Vilva ver kudineer	
-	Rasa parpathi	
	mathirai	
-	Inji pirandai leghyam	

VALI GUNMAM	SATTHEE GUNMAM
Kal uppu choonam	Kunma kudori leghyam
Aya vera	Naaga parpam
chendoram	
Gunma kudori	-
leghyam	
Rasa parpathi	-
mathirai	

Medicines exclusively used for all types of Gunmam in Siddha:

- 1. Gunma kudori
- 2. Anda leghyam
- 3. Kunma leghyam or Karuvepilai leghyam
- 4. Inji rasayanam
- 5. Sowbakya sundi
- 6. Sangu parpam
- 7. Kunma Kudori mezhugu
- 8. Nellikai Leghyam
- 9. Chitira moola kuligai
- 10. Taambira parpathi mathirai
- 11. Vera mezhugu
- 12. Kunma Kaalan (Sembu parpam)
- 13. Sembu chendooram
- 14. Taambira chendooram
- 15. Savveera parpam
- 16. Panja soodha mezhugu
- 17. Aya chendooram
- 18. Uppu chendooram
- 19. Nava upu mezhugu
- 20. Vedi upu choonam
- 21. Bojana kudori mathirai
- 22. Panja paana mathirai
- 23. Gandhaga chendooram

The above listed commercially available medicines can be used for all types of Gunmam according to Siddha Literature.

"Food is medicine, medicine is food" is one of the policies of Siddha.

Diet restrictions in Siddha for Gunmam:

- 1. Should consume double time boiled rice
- 2. Should consume fresh vegetables
- 3. Brinjal, Drum stick, ladies finger, Ribbed luffa, cucumber are prescribed to consume daily
- 4. Should not consume coconut, horse gram, black gram and non-vegetarian foods like fish, dried fish, chicken
- 5. If there is indigestion should have only over cooked rice (Kanji)
- 6. Should consume Ginger, Adamant creeper, coriander, Mentha Chutneys without adding Chillies.

Experimental Pharmacology - a Data collection

1. Cuminum cyminum

The chief constituent of the volatile oil is cumaldehyde. Cumin seeds contain up to 14.5% lipids. These are reported to contain 14flavonoid glycosides; 7 belong to apigenin, 5 to luteolin and 2 to chrysoeriol group. Major constituents of the essential oil include cuminaldehyde (20-40% of the oil) and *p*-cymene. Et OH (50%) extract of the fruit exhibits spasmolytic and hypotensive activity. Cumin is considered superior is comforting carminative qualities to Fennel or Caraway. Cuminaldehyde and Cumin oil are reported to exhibit a strong larvicidal and antibacterial activity.

2. Quercus infectoria

The galls contain 50-70% gallo tannic acid, gallic acid 2-4%, ellagic acid, nyctanthic acid, rubric acid, besides sugars, starch, an essential oil and anthocyanins. Galls were also found to contain beta-sitosterol, amentoflavone, hexamethyl ether and isocryptomerin. It is used for chronic dysentery, amoebiasis, GIT disorders and mainly ulcer.

3. Papaver somniferum

The petals are reported to contain a dark red pigment, namely mecocyanin chloride and another cyanidin derivative. The study has revealed the presence of cyanidin-B and pelargonidin-C in the flowers. Opium contains Isoquinoline alkaloids; the major one is morphine with narcotine, codeine, papaverine and thebaine. Poppy seeds, used in Indian medicine, do not contain alkaloids. The seeds contain thiamine 420, riboflavin 49, folic acid

30, pantothenic acid 2667 and niacin 1877 mcg/100 g. The seed oil (from Turkey) contains gamma-tocopherol 220, alpha-tocopherol 40 and beta-tocopherol 20 mcg/ 100 g. It has demulcent action but should be given with cautious.

4. Mucuna pruriens

Its principle constituents are L-DOPA and the bioactive alkaloids mucunine, mucunadine, mucunadine, prurienine and nicotine as well as sitosterol, glutathione, lecithin, oils, venolic and gallic acids. They contain a number of bioactive substances including tryptamine, alkylamines, steroids, flavonoids, coumarins and cardenolides. Prurieninine slowed downs the heart rate, lowers blood pressure. The spasmolysis of smooth muscles are caused by indole bases. It has best aphrodisiac and anti-ulcer property.

5. Elateria cardamomum

Cardamom decreases gastric secretion. Cardamom is diuretic and flush out accumulated toxins from the body. Cardamom is used in treating digestive disorders relieving hear burn and bloating. The oil is composed amost exclusively of oxygenated monoterpene derivatives: alpha-terpineol 45%, myrcene 27%, limonene 8%, menthone 6%, Betaphelandrene 3%, 1,8-cineol 2%, sabinene 2% and heptane 2%.

6. Piper nigrum

The fruit yielded piperine, piperatine and piperidine, amides, piperyline, piperoleins A and B, and N-isobutyl-cicosa-trans-2- trans-4-dienamide. The neolignan schmiditin, together with lignin galgravin as well as friedelin, beta-sitosterol and its beta-O-glucoside have been isolated from the extract of aerial parts. The extract exhibited Anti-amoebic activity. It has bacteriostatic, fungistatic, anti-inflammatory and rubefacient properties. It has antidote, expectorant and anti-ulcer property.

7. Bacopa monniera

The major constituents of Bacopa monnieri contains bacoside A and B, brahmine, herpestine, monnierin, hersaponin, D-mannitol, betulic acid, B-sitosterol, stigmasterol, a-alamine, aspartic acid, glutamic acid, saponins, serine. Brahmi has been valued as a cardiac, nerve and brain tonic and widely used by students for improving mental clarity, confidence, intelligence, concentration and memory recall. Brahmi as herbal supplements and tablets have been marketed for super learning, for memory and as a brain tonic.

8. Butea monosperma

The bark exudes a red juice that dries to form the Butea gum. The gum contains leucocyanidin, its tetramer, procyanidin, gallic acid and mucilaginous material. The gum is a powerful astringent; it is given internally for diarrhea, dysentery, phthisis and hemorrhage of the stomach and bladder. The plant contains flavonoids and glucosides—butin, butrin, isobutrin and palastrin. Flowers contain butrin, coreopsin, monospermoside and their derivative.

9. Zingeber officinale

It is used as a kaya karpam with it is soaked in honey. It has well stomachic, sialogogue, carminative. It is a constituent of Tri-kadugu. It is used as an accessory drug for gastro-intestinal disorders. It contains gingerol, zingerone, oleoresins, vallinoids, gingerdione, galalnals A and B, (6) shagaol.

10. Aloe vera

Latex obtained from this used to cure, dysentery and ulceration of stomach. The Gel obtained from this has coolant action. It maintains the body temperature. Aloe vera contains 75 potentially active constituents: vitamins, enzymes, minerals, sugars, lignin, saponins, salicylic acids and amino acids. It contains vitamins E,C and A (beta-carotene), which are antioxidants. Aloe has been we known for centuries for its healing properties, and both oral intake and topical dressings have been documented to facilitate healing of any kind of skin wound, burn, or scald even speeding recovery time after surgery. Situations to try it on include blisters, insect bites, rashes, sores, herpes, urticarial, ulcer, athlete's foot, fungus, vaginal infections, conjunctivitis, sties, allergic reactions, and dry skin.

CONCLUSION

Gastrointestinal disorders are one of the major important causes of morbidity in the populations of non-industrialized countries. This review article clearly deceits Siddhars way of approaching a disease and their command over all the aspects of the disease. More work are to be done to further explore the wonderful prophylatic and therapeutic activities of siddha medicines and Siddhars principles.

REFRENCES

- **1.** Dr. K.S. *Murugaesa Mudhaliyar* 2013, Gunapadam Mooligai "Ninth edition, published by Directorate of Indian Medicine and Homeopathy, Chennai, India.
- **2.** Dr. R. Thiyagarajan, LIM, 2008, *Siddha Maruthuvam- Sirappu*, Third edition, published by Directorate of Indian Medicine and Homeopathy, Chennai, India
- **3.** Dr. K. N. Kuppusamy Muthaliar, HPIM, Dr. K. S. Uthamarayan, HPIM, 2009, *Siddha Vaithya Thirattu*, Third edition, published by Directorate of Indian Medicine and Homeopathy, Chennai.
- **4.** Dr. R. Thiyagarajan, LIM. 2013, *Gunapadam Thathu Jeeva Vaguppu*, Eight edition, published by Directorate of Indian Medicine and Homeopathy, Chennai.
- **5.** Dr. M. Shanmugavelu, HPIM, *Noi Nadal Part I and II* "Fifth edition, published by Directorate of Indian Medicine and Homeopathy, Chennai.
- **6.** Dr. M. Shanmugavelu, HPIM, *Noigaluku siddha parigaram* Part I and II "4th edition, published by Directorate of Indian Medicine and Homeopathy, Chennai.
- **7.** C.K.Kokate, A.P.Purohit,S.B. Gokhale, Pharmacognosy" 46 th Edition, Published by Nirali prakashan, Pune.
- **8.** C.P. Baveja, Text Book of Microbiology, 4 th edition, published by Arya publication, Sirmour (H.P.).
- **9.** Encyclopaedia of medicinal plants www.indianmedicinalplats.info , Accessed on March 7,2015.
- 10. C. P. Khare, Indian Medicinal Plants of Ayurveda and Siddha, India.
- **11.** L. Mahadevan, C. Mary Sharmila, B. Senthamil Selvan, Siddha Practical Prescriber published by Saradha Mahadeva Iyer Ayurvedic educational & charitable trust, kanyakumari.
- 12. P.S. Kupusami mudhaliyar 2002, *Anubhoga vaithiya brahma ragasiyam*" First edition, published by Jayam printers, Madurai.
- 13. M.Shanmugavelu S.P.I.M., 2004, *Noigaluku Siddha parigaram*" Fourth edition, published by Directorate of Indian Medicine and Homeopathy, Chennai, India.