



A CASE SERIES ON CHOLELITHIASIS (GALL STONES)

PARAMESHWARI L H^{1*} VARSHA KULKARNI²

^{1*}Final year PG Scholar, PG Dept of Panchakarma Government Ayurveda medical college Mysuru

²Professor and Head PG Department of Panchakarma Government Ayurveda medical college Mysuru

Corresponding Email id: param.hembade97@gmail.com Access this article online: www.jahm.co.in

Published by Atreya Ayurveda Publications under the license CC-by-NC-SA 4.0

ABSTRACT:

Cholelithiasis is a common gastrointestinal disorder. Gallstones form when bile stored in the gallbladder hardens into a stone-like material. Too much cholesterol, bile salts, or bilirubin (bile pigment) can cause gallstones. The prevalence of cholelithiasis varies according to geographical distribution, sex, and age. As per contemporary science, the main treatment modality for this condition is surgery. Due to distress from the surgical procedure people are turning towards the science of medicine for non-surgical procedures. The disease Cholelithiasis has not been described directly in *Ayurvedic* classics. The word *Ashmari* is described only in the context of *Bastigata Ashmari* (urinary calculi). After revising *Ayurvedic* texts we come across the bile secreted from the gallbladder can be correlated with *Accha Pitta* mentioned in *Ayurveda* due to the similarity in location and function. In the *Ayurvedic* context, *Pittashaya Ashmari* is not directly explained. This theory of *Pittashaya Ashmari* is explained as the *Ashmari* (stone) which usually combines with urine here it gets combined with *Pitta* with the help of *Vata* and gets lodged in *Pittaashaya* to form *Pittashaya Ashmari*. In the present article, an attempt is made to manage and portray the non-surgical management through an *Ayurvedic* point of view.

Keywords: Cholelithiasis, *Avapeedaka Snehapana*, *Trinapanchamooladi Ghruta*

INTRODUCTION

Cholelithiasis (gallbladder stone) is a medical condition where hard, pebble-like deposits develop within the gallbladder of an individual and are formed from constituents of bile, cholesterol, bile pigments, calcium salts, bilirubin, phosphate carbonate, palmitate, and proteins. The prevalence of cholelithiasis is 10 to 20% of the world population and in India has been reported as 2 to 29% and it is seven times more common in North India. Women are affected more than men, and the ratio is 4:1. It is said that gallstones are common in fat, fertile, forty, females. Cholelithiasis is treated only with surgery i.e., removal of gall bladder (cholecystectomy) which leads to impaired digestion of fats and proteins^[1].

The disease cholelithiasis is not been described directly in the classics of *Ayurveda*. The term *Ashmari* in *Ayurveda* stands for stone which is described only in the context of *Bastigata Ashmari* (urinary calculi)^[2]. Gall bladder stores *Pitta*, hence the organ gall bladder is considered as *Pittashaya* in *Ayurveda*, and the stone formed in it can be considered as *Pittashaya Ashmari*.

Cholelithiasis presenting clinical features like right hypochondriac region pain radiating to the back, nausea, vomiting, indigestion, and anorexia can be correlated with clinical features of *Pittashaya Ashmari* in *Ayurveda*.

Management of gallstones can be divided into two categories: asymptomatic gallstones and symptomatic gallstones. Asymptomatic gallstones require conservative treatment. Patients with symptoms will require surgery which is quite risky and leads to complications. Sometimes a gallstone may get pass through the cystic duct and get lodged and impact the common bile duct, and causes obstruction and jaundice.

Acharya Charaka and *Vagbhata* have mentioned a special type of administration of *Sneha* in *Ashmari* called *Avapeedaka Snehapana*^[3], The *Sneha* which is given before and after the digestion of meal in *Uttama Matra* is called *Avapeedaka Sneha*, which is usually indicated in *Adho Nabhigata Vikaras* specially *Mootraghata, Arsha, Rakta Arsha*^[4]. Even though it is indicated in *Adhonabhigata Vikaras* one attempt was made on how it acts on *Pittashaya Ashmari*. Hence this case series was considered with the aim to describe the potentiality of *Ayurvedic* treatment in the management of cholelithiasis.

CASE HISTORY

Total 3 subjects were selected from outpatient department of government ayurveda medical college, Mysuru, Karnataka. An informed consent from each patient was obtained before starting the course of treatment.

Table 1: Case details of 3 patients

Characters	Patient 1	Patient 2	Patient 3
Age	26years	37years	56years
Gender	Male	Female	Female
Opd no.	28981	364	35182
Past history	Nothing significant	Nothing significant	Nothing significant
Personal history	<i>Teekshanagni</i> <i>Krura koshta</i>	<i>Teekshanagni</i> <i>Krura koshta</i>	<i>Mandagni</i> <i>Madhyama koshta</i>
Symptoms			
Pain abdomen	+	+	+
Pain in flanks	+	+	+
Back pain	-	+	+
Nausea	-	+	+
Vomiting	-	-	+
Malaise	+	+	+
Burning in chest region	+	+	+
Other symptoms	-	+	-

Examination findings:

Systemic examination:

CVS, CNS, RS- No abnormality detected.

Table 2: shows local examination: per abdomen

	Patient 1	Patient 2	Patient 3
On inspection	No distension	Mild distension	Mild distension
On palpation	No tenderness	Mild tenderness	Severe tenderness
Usg impression	Cholelithiasis	Cholelithiasis	Cholelithiasis

Therapeutic intervention: Avapeedaka Snehapana with Trinapanchamooladi Ghrita

Table 3: shows therapeutic intervention

	Patient 1		Patient 2			Patient 3	
<i>Deepana pachana</i> with <i>chitrakadi vati</i> 250mg tid before food	6 days		5 days			5 days	
Days	1	2	1	2	3	1	2

<i>Pragbhaktika Snehamatra /</i> time of administration	50ml / 8am	60ml/ 8:15am	40ml / 8:20am	50ml / 8am	65ml / 8am	50ml / 8am	60ml / 8:10am
<i>Sneha jirnakala</i>	3pm	2:30pm	2:20pm	2pm	1:45pm	2:30pm	3pm
<i>Ahara sevan kala</i>	3:15pm	3pm	2:30pm	2:15pm	2pm	3pm	3:10pm
<i>Ahara jirna kala</i>	7pm	6:30pm	6:30pm	6pm	6pm	7:30pm	7pm
<i>JeernantikaSnehamatra</i> /time of administration	100ml / 7:30pm	110ml/ 7pm	90ml / 6:45pm	110ml / 6:30pm	135ml / 6:15pm	100ml / 7:45pm	120ml / 7:15pm
<i>Sneha jirna kala</i>	5:30am	6am	4:30am	5am	6am	6am	5:30am

After completion of daily rituals and after attainment of *Jeerna Ahara Lakshana* on Day 0- *Hrusiyasi Matra* (30ml) of *Trinapanchamooladi Ghruta* was given in *Kshudhita Avastha* and *Ananna Kala*, *Jeerna Kala* was observed, depending on this *Jeernakala* of *Ghruta*, *Uttama Matra* (dose of) Day 1 was calculated. According to *Vakhya Pradeepika Teeka* of *Astanga Hrudaya*, obtained dose was divided into $1/3^{rd}$ and $2/3^{rd}$. $1/3^{rd}$ is *Prakbhakta Sneha* i.e *hrusva matra* and $2/3^{rd}$ is *Ahara Jeernantika Sneha* i.e. *uttama matra*.

On Day 1- *Ghruta*($1/3^{rd}$) was given in *Kshudhita Avastha* and *Ananna Kala*, after attaining *Sneha Jeerna Lakshana*, *Ahara* was given and after attaining *Jeerna Ahara Lakshana Uttama Matra* of *Ghruta*($2/3^{rd}$) was administered. In between *Ushna Jala Anupana* was given. This was repeated till *Vyadhi Shamana Lakshans*, along with *Lakshanas* like *Snehodhwega* and *Adhastasnehadarshana*.

Observation & Results:

Table 4: shows symptomatic Relief:

Symptoms	Patient 1		Patient 2		Patient3	
	BT	AT	BT	AT	BT	AT
Pain abdomen	++	-	++	-	++	-
Pain in flanks	++	-	++	-	++	-
Back pain	-	-	++	-	++	-
Nausea	-	-	++	-	++	-
Vomiting	-	-	-	-	++	-
Malaise	++	-	++	-	++	-
Burning in chest region	++	-	++	-	++	-
Other symptoms	-	-	++	-	-	-

*BT-Before Treatment *AT- After Treatment *(+)- Present *(-)- Absent

Table 5: shows VAS for pain

	Before treatment	After treatment
Patient 1	Mild (1-3)	No pain(0)
Patient 2	Moderate (4-6)	No pain (0)
Patient 3	Very severe(7-9)	No pain (0)

Table 6: Abdomen ultrasonography findings:

	Size of the stone	
	BT	AT
Patient 1	8mm(27/10/22)	6mm(14/11/22)
Patient 2	5-10mm(17/11/22)	2-5mm(31/01/23)
Patient 3	10mm(26/09/22)	8mm(24/11/22)

The same treatment protocol was repeated for patient 1 and patient 2 after giving 2 to 3 months gap results were as follow;

Table 7: Abdomen ultrasonography findings after second setting:

	Size of the stone	
	BT	AT
Patient 1	6mm(12/01/23)	4mm(02/02/23)
Patient 2	2-5mm(31/01/23)	Nil(05/05/23)

DISCUSSION:

The word *Ashmari* in *Ayurveda* stands for stone which is described only in the context of *Bastigata Ashmari*. According to *Acharya Sushruta*, there are *Sapta Aashayas* in which *Pittashaya* is one^[5]. The *Achhapitta* generated in the second stage of digestion bears striking similarity with bile which is stored in gallbladder^[6]. This *Acchapitta* is generated from liver and stored in gallbladder. This implies that gallbladder stores *Pitta*(bile), hence this organ is considered as *Pittashaya*

and the stone formed in it can be considered as *Pittashaya Ashmari*.

According to *Ayurveda*, the probable pathogenesis of gall stone can be explained as *Kaphaprapakopa Nidanasevana*^[7] with *Pittakaraka Nidanasevana*^[8] initially leading to *Kapha* accumulation, and then producing symptoms such as *Alasya, Gaurava, Mandoshmata*. The *Kapha* and *Pitta* which is already present in *Pittashaya* mix together leading to the formation of viscous material (biliary sludge) causing obstruction in the

passage of *Vayu*. *Vayu* gets vitiated by its *Rukshadi Gunas* and converts the viscous material into dry and solid form called as *Pittashaya Ashmari* (gall stone).

Dalhana while commenting on the *Samprapti* of *Ashmari*, explained that in a person who does not undergo purification regularly and who indulges in unhealthy foods and activities, *Kapha* gets aggravated and unites with urine and forms *Ashmari*^[9]. *Dalhana* makes a comment that *Ashmari* will be *Na Eka Desha* which means *Ashmari* will not manifest in one particular place. In this context instead of combining with urine, the *Kapha* gets combined with *Pitta* with the help of *Vata* and forms *Ashmari* in *Pittashaya*. So this can be considered as *Pittashaya Ashmari*.

Ashmari has properties like *Rukshata*, *Kharatva*, and *Kathinata* thus *Snehana* plays an important role in *Samprapti Vighatana*. Due to its *Snigdhatva*, *Mandaguna*, *Pichchilata*, and *Kleda Guna*, *Sneha* help in the easy detachment of *Ashmari* from its roots. Due to its *Mruduguna*, *Saraguna*, the *Ashmari* can easily pass out. Here *Avapidaka Sneha* is one of the ideal choices for *Snehana*.

Deepana Pachana with *Chitrakadi Vati* was given till *Nirama Lakshanas* which does *Srotoshodhana*, *Amapachana*, *Agnideepana* and *Vatanulomana*.

In this study, subjects are habituated to eating a high-fat diet, high-cholesterol diet, and low-fiber diet this leads to excessive bile secretion in the liver and this gets lodged in the gall bladder resulting in cholesterol type of gallstones. In contemporary science, surgery is the most common line of treatment for gallstones, however, the fact that surgically removing gallstones requires the removal of an entire organ has led to a growing interest in non-surgical intervention. But so far the medical management of gallstone is not up to the mark in the allopathic system. So, to overcome this an attempt was made to assess how *Ayurvedic* drugs like *Trinapanchamooladi Ghrita* which possesses anti-inflammatory, analgesic, and hypolipidemic activity act on gallstones in the form of *Avapeedaka Snehapana* and how it prevents further complications like jaundice, etc.

Avapeedaka Snehapana is a special pattern of *Snehapana* in which *Sneha* is administered in 2 Kala (period) at a stretch, that is, *Pragbhakta* (before food) in *Hrusvamatra* and *Ahara Jeernanthaavastha* (after the digestion of food) in *Uttamamatra* respectively. The word *Avapeedaka* implies the meaning of either the *Peedana* (pushing down) of *Dosha* or the *Peedana* of *Ahara* and it can be practiced in different ways- 1/4th of ghee is taken before food, 3/4th taken after digestion, or 1/3rd of

ghee is taken before food, 2/3rd taken after digestion as said by *Vakyapradeepika* commentary. In this study, 1/3rd of *Sneha* was administered before food (empty stomach) and the remaining 2/3rd of *Sneha* after digestion of food. Giving *Sneha* on an empty stomach cures the diseases caused by *Kapha*^[10] and also *Yakritavikara*. As *Ashmari* is a *Kaphaja Vikara* associated with *Apana* and *Vyana Vata Dushti*, *Snehapana* is introduced on an empty stomach. Here *Kala* plays a very important role because it corrects the hampered functions of the *Apana* and *Vyana Vata*. As a result, it leads to *Anulomana Gati* of *Apana Vayu* which helps in expelling the *Ashmari* through downward movement. When *Sneha* is administered after digestion of food, it helps to normalize the increased cholesterol and also causes stability of the sense organs

and cures the diseases of the upper parts of the body^[11].

In this study, *Trinapanchamooladi Ghrita* has been used for *Snehapana* which possesses properties like *Madhura, Tikta, Kashaya Rasa; Snigdha, Laghu Guna; Madhura Vipaka; Sheet Virya*, and *Tridosahara* properties.

Actions:

Mutrala-by its *Madhura Rasa, Snigdha Guna, Sheeta Veerya* and *Madhura Vipaka Bhedana- Tikta, Kashayrasa* and *Laghu Guna*

↓
Decrease in size

Trinapanchamooladi Ghrita contains beta sitosterol, chlorogenin, tenine, rhamnase and cylindrine which helps to prevent infection and reduce the size of stone by its hypocholesterolemic activity and anti-inflammatory activity.

Table 8: Chemical composition and pharmacological action of *Trinapanchamooladi ghrita*

Chemical composition	Pharmacological action
Beta sitosterol	Hypocholesterolemic activity, anti-inflammatory
Rhamnase	Anti-inflammatory, immunity-improving
Chlorogenin	Hypolipidemic activity, analgesic, anti-inflammatory
Tenine	Anti-inflammatory
Cylindrine	Anti-inflammatory

CONCLUSION:

Avapeedaka Snehapana with *Trinapanchamooladi Ghrita* is found to be a clinically safe and effective therapy in the management of cholelithiasis. *Avapeedaka* is

not commonly practised and needs further researches to access its efficacy with different dosage in different conditions of *Adhonabhigata Vikaras* etc.

REFERENCES:

1. Stanley Davidson, Editor. Davidson's principles and practice of medicine, 22nd edition, 23rd chapter; 981
2. Ravidatta Tripathi(editor). charaka Samhita of Charaka, chikitsa sthana chapter 26, verse no. 36, Varanasi; chaukhamba Sanskrit pratishthana;2015:630
3. Yadavaji Trivikamji(editor). Commentary: Ayurveda Deepika of Chakrapani on Charaka Samhita of Charaka, Sutrasthana, Chapter 07, verse no. 6-7, Varanasi chaukhamba Sanskrit pratishthana;2015:122
4. Brahmanand Tripathi(editor). Astangahridayam of srimadvagbhata, Sutra Sthana Chapter 16, verse no. 19, Delhi; Chaukhamba Sanskrit pratishthana;2019:208
5. K.R.Srikantha Murthy(editor). Sushruta Samhita of Sushruta, Shareera Sthana, chapter 5, verse no. 8, Varanasi; Chaukhamba Orientalia;2012:80
6. Ravidatta Tripathi(editor). charaka Samhita of Charaka, chikitsa sthana chapter 16, verse no. 18, Varanasi; chaukhamba Sanskrit pratishthana;2015:408
7. K.R.Srikantha Murthy(editor). Sushruta Samhita of Sushruta, Chikitsa Sthana, chapter 21, verse no. 21, Varanasi; Chaukhamba Orientalia;2012:103
8. K.R.Srikantha Murthy(editor). Sushruta Samhita of Sushruta, Chikitsa Sthana, chapter 21, verse no. 23, Varanasi; Chaukhamba Orientalia;2012:104
9. Yadavaji Trivikamji(editor). Commentary: Nibandha Sangraha of Dalhana on Sushruta Samhita of Sushruta, Nidana Sthana , Chapter 3, verse no. 3, Varanasi, Chaukhamba Orientalia;2014:726
10. Brahmanand Tripathi(editor). Astangahridayam of srimadvagbhata, Sutra Sthana Chapter 13, verse no. 38, Delhi; Chaukhamba Sanskrit pratishthana;2019:190
11. Brahmanand Tripathi(editor). Astangahridayam of srimadvagbhata, Sutra Sthana Chapter 16, verse no. 22, Delhi; Chaukhamba Sanskrit pratishthana;2019:208

CITE THIS ARTICLE AS

Parameshwari L H, Varsha Kulkarni. A case series on cholelithiasis (gall stones). *J of Ayurveda and Hol Med (JAHM)*. 2023;11(6):70-77

Conflict of interest: None

Source of support: None