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Case Study

CONSERVATIVE AYURVEDIC TREATMENT IN CHRONIC CALCULUS CHOLECYSTITIS *(PITTASHMARI)*

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ABSTRACT

Chronic calculus cholecystitis is commonly treated by cholecystectomy; however, a subset of patients either decline surgery or are medically unfit, underscoring the need for organ-preserving alternatives. Within the Ayurvedic framework, gallstone disease *(Pittashmari)* is managed by correcting *Dosha* imbalance, normalizing *Agni*, and promoting the disintegration and expulsion of calculi. A 58-year-old female presented with 30-day history of recurrent right upper abdominal pain radiating to the back, associated with bloating, flatulence, indigestion, occasional vomiting, reduced appetite and altered bowel habits. Baseline Ultrasonography demonstrated a contracted gallbladder with 6mm wall thickening and a solitary 7mm calculus, consistent with chronic calculus cholecystitis *(Pittasmari),* along with mild fatty changes in the pancreas. The patient declined cholecystectomy and elected to undergo Ayurvedic management. An Ayurvedic treatment protocol was implemented for 2 months and 23 days. Symptomatic improvement was observed within 15 days of initiating therapy and a reduction of calculus size by 35.70% and normalisation of pancreatic echotexture and duct caliber. The case study suggest that a structured Ayurvedic treatment protocol may achieve meaningful Symptomatic relief and partial radiological improvement in chronic calculus cholecystitis *(Pittaasmari)*, thereby justifying further evaluation in larger controlled studies.

INTRODUCTION

Chronic calculus cholecystitis [ICD-10-CM: K80.10] is a highly prevalent hepatobiliary disorder affecting approximately 10 to 20% of the adult population globally.[1] In modern medicine, cholecystectomy (surgical removal of the gallbladder) remains the primary treatment for symptomatic Cholelithiasis, but surgical complication such as bile duct injury, bile leakage, and post-cholecystectomy syndrome (chronic diarrhea) often become lifelong issues. [2] Consequently, there is growing global interest in conservative non-surgical Ayurvedic management.[3] According to Ayurvedic principles, cholelithiasis is correlated with *Pittashmari,* representing the formation of calculi within the *Pittashaya* (gallbladder). [4]

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The pathophysiology is deeply linked to the imbalance of the *Tridosha (Vata, Pitta, Kapha)* and impaired *Agni* (digestive and metabolic energy).[1] Anatomically, the gallbladder stores *Accha pitta* (pure bile), which remains liquid due to its *Ushna* (hot) and *Snigdha* (unctuous*)* qualities. Consumption of *Viruddha Ahara* (incompatible diet) impairs digestion, leading to the formation of *Ama* (toxic, undigested metabolic waste)[4]. The pathology involves sequences of biochemical events. *Pitta* vitiation increases systemic heat, making bile highly concentrated and viscous. Aggravated *Kapha dosha* introduces a heavy mucin-rich framework, acting like a binding agent to hold cholesterol crystal together. Finally, vitiated *Vata dosha* causes biliary stasis, drying out the viscous mixture and molding it into *Ashmari* (solid stone)[5]. Modern physiology corroborates this triad: cholesterol supersaturation, rapid musin-mediated nucleation, and gallbladder hypo motility (stasis).[6] Pharmacological management of *Pittashmari* (gallstone) requires a multi-dimensional approach, including *Deepana-*

pachana (liver stimulation), *Pittavirechana* (ensuring bile flow), and *Ashmari bhedana* (stone dissolution).

Case Report

A 58-year-old female patient presented with recurrent dull pain in the upper quadrant of the abdomen, radiating to the mid-back or right scapular region. The pain was moderate intensity along with intermittent vomiting, frequent bloating, excess gas formation and indigestion over the last 30 days along with irregular bowel movements. There was no problem in passing urine, and the patient reported a decreased appetite. The patient had no history of hypertension or diabetes and no family members reported similar symptoms.

General Examination

- Blood Pressure - 130/70
- Pulse Rate - 68bpm
- Respiration Rate - 18/cpm
- Pallor- Absent
- Icterus - Not found
- Cyanosis- Not found
- Clubbing- Not Found
- Lymphadenopathy- Not available
- Edema- Not Present

Systemic Examination

- Central nervous examination- Conscious well oriented to time, place and person.
- Cardiovascular Examination- S1 and S2 audible.
- Respiratory examination- Air entry bilaterally equal
- Abdominal Examination
  - Inspection- Distended
  - Palpation- Right upper quadrant abdominal tenderness which was moderate in nature. Murphy's Sign absent.

Astavidha Pariksha

- *Nadi- Vata-Pittaja*
- *Mala- Samyak* (regular)
- *Mutra- Samayak* (regular)
- *Jihva- Alpa amaa yukta* (coated with *Ama*)
- *Shabda- Spashta* (clear)
- *Drika- Prakruta* (normal)
- *Akriti-Madhyama* (medium)

Investigation: USG Abdomino-Pelvis on 08/May/2025

- Gall Bladder: Gall bladder is completely contracted. Wall is thickened 6mm. One solitary echogenic calculus 7mm is seen in lumen. Chronic calculus Cholecystitis.
- Pancreas: Pancreas is normal in size. Parenchymal echogenecity is slightly increased suggestive of early fatty changes.

Management

The process of treatment was as follows:

1. *Arogyavardhini Vati* has been given 2 tablets twice a day before food with warm water.
2. *(Sutasekhar rasa + Kandudha rasa)* has been given (2+2) tablet twice a day after food with warm water.
3. *Kokilaksha Kshara* has been given 250mg twice a day after food
4. *Sarapukha Swarasa* has been given 10ml twice a day before food.
5. *Phaltrikadi Pachana* has been given 20ml with 20ml of water twice a day before food.
6. *Varunadi Kashya* has been given 10ml with 20ml of water twice a day before food.

As far as the subjective parameters go, the patient had begun feeling better right from the start (i.e., 15 days post introduction of medicine). The patient was treated for 2. 5 month and the follow-up visits, Symptoms were assessed.

Total Duration- 2 month 23 days

RESULTS

Post two months treatment period, the patient was called back for a follow up discussion about treatment any further treatment options. The patient was advised to get an abdominal ultrasound (USG) to evaluate the prognosis. Subjective Parameters and USG changes before and after treatment have been mentioned in Table 1 and Table 2. The USG reports has been attached below for your reference.

Table 1: Subjective assessment of symptoms

S.No	Symptoms	Grading	Before treatment	After treatment
1	Heaviness of the abdomen	0-No heaviness after taking food 1-Mild heaviness after taking food 2-Moderate after taking food 3-Severe after taking Food	3	0
2	Nausea	0-No nausea 1-Mild nausea not requesting	2	0

		pharmacological rescue 2-Moderate nausea requesting pharmacological rescue 3-Severe resistant to pharmacological rescue		
3	Pain	0-No pain 1-Mild pain 2-Moderate pain 3-Severe pain	2	0

Table 2: USG Abdomen Findings

Before Treatment	After Treatment
• Gall Bladder: Gall bladder is completely contracted. Wall is thickened 6mm. One solitary echogenic calculus 7mm is seen in lumen. Chronic calculus cholecystitis. • Pancreas: Pancreas is normal in size. Parenchymal echogenecity is slightly increased suggestive of early fatty changes. Main pancreatic duct is not dilated. No obvious focal lesion is seen.	• Gall Bladder: Gall bladder is normally distended with thickened wall. A 0.45cm (4.5mm) calculus noted in the lumen of gall bladder, suggestive of - Chronic Calculus Cholecystitis. • Pancreas: Normal in size, shape & outline. No focal S.O.L. or calcification noted. Main pancreatic duct - not dilated. • Reduction the calculus size in 2.5 month 35.70%. resulting in total size reduction of 2.5mm.

DISCUSSION

Gallstone disease or cholelithiasis affects 10% to 20% of adults globally while cholecystectomy is the primary treatment, complication persist. Ayurvedic management, Associating Cholelithiasis with *Pittashmari*, involves addressing *Tridosh* imbalance and impaired *Agni* through Pharmacological strategies like *Deepana-pachana* and *Ashmari Bhedana*, using seven Specific Formulation.

1. ***Arogyavardhini vati*:** *Arogyavardhini vati* is a potent poly-herbal and herbo-mineral formulation extensively employed in the management of metabolic and hepatobiliary disorders. It enhances liver function correct lipid metabolism and serves as a potent cholagogue. The formulation primarily comprises *Kutki (Picrorhiza Kurroa),* which constitute 50% of its total mass. Other essential components include *Shuddha guggulu (Commiphora mukul), Tamra Bhasma* (incinerated Copper), *Suddha Shilajatu (Asphaltum)* and *Chitraka (Plumbago zeylanica)*.[7]

   Pharmacodynamics and Mechanism of Action: The hepatoprotective action of *Arogyavardhin Vati* is due primarily to the ingredients present in the medicinal plant, especially those that are present in the *Triphala* combination, i.e., *Terminalia chebula*, *Terminalia belirica* and *Emblica officinalis* (*Phyllanthus emblica*). These herbs contain antioxidative properties that help in protection from oxidative damage and stress in the liver. *Terminalia belirica*, in particular, has antioxidative and hepatoprotective properties, mainly because of the presence of ellagic acid. Additionally, the presence of *Kutki (Picrorhiza kurroa) Shuddha guggulu (Commiphora mukul) and* other plant components further supports liver protection by enhancing detoxification and bile secretion. However, *Arogyavardhini Vati* also contains mercuric sulfide (Hgs) and minerals like Cu and Fe, contributing to its overall pharmacological profile but requiring careful use due to potential toxicity.[8,9,10]

2. ***Sutasekhar Rasa* and *Kamdudha Rasa:*** The impaction of stone in the gallbladder neck or cystic duct induces biliary colic, characterized by severe pain in the right upper quadrant, often accompanied by nausea and dyspepsia.[11] *Sutasekhar Rasa* and *Kamdudha Rasa* Primarily employed to pacify vitiated *pitta,* neutralize Hyperacidity, and alleviative smooth muscle spasms.[12]

   Pharmacodynamics of *Sutasekhar Rasa*: *Sutasekhar Rasa* is a highly effective *Pittashamaka* and *Amlapittahara* formulation. Its pharmaco-dynamics Properties resemble those of anticholinergic and antispasmodic agent.[12]

   Pharmacodynmics of *Kamdudha Rasa*: *Kamdudha Rasa*, administered as an adjuvant, contains biologically active compound as *Mukta, Praval* and *Shankha Bhasma* known for their *Sheeta Virya.* The Calcium carbonate matrix rapidly neutralizes acidic bile reflux and gastric hydrochloric acid. [13] In cases of inflamed gallbladder mucosa (cholecystitis), inflammatory cytokines are released due to mechanical trauma from stones. [14]

3. ***Kokilaksha Kshara***

Kshara therapy is integral to Ayurvedic medicine, employing highly alkaline ash from specific botanicals. *Kokilaksha* (*Asteracantha longifolia*) is a notable botanical precursor for *Kshara*, renowned for its non-surgical efficacy in dissolving urinary and biliary calculi *(Ashmari).*

Physicochemical Litholysis: *Paniya Kshara*[15] have properties like *Chedana, Bhedana, Lekhana, Vilayana* and *Mutrala.* It may facilitate disintegration, fragmentation and gradual dissolution of calculi. Its *Tridohsaghna* action may further support correction of the pathological milieu associated with some formation. The ropana property may ais healing of mucosal injury caused by calculi, while its alkaline nature may help modulate the pH.

***Kokilaksha*[16]**

- *Madhura* and *Tikta rasa →Pittasamana:* May help alleviate *Daha*, while *Amla rasa → Vatasamana* is proposed to reduce *Sula* or *Vedana.*
- *Picchila, Snigdha* and *Sita guna:* Their *Vrana-ropaka* and *Samana* effects may support recovery of irritated urinary mucosa.
- *Kshar Guna: Kshar* attributes of *Vata* implicated in progressive consolidation of the calculus.
- *Madhura Vipaka:* It is *Vata-pitta samaka*, thereby providing symptomatic relief, particularly from *Vedana* and *Daha*.

4. ***Sharapunkha Swarasa:*** *Sharpunkha (Tephrosia purpurea)* has been shown to exhibit hepato-protective properties due to the presence of antioxidants, anti-inflammatory and membrane-stabilizing action. The plant protects liver cells against damage caused by toxin and oxidative stress, by scavenging free radicals and increasing the production of endogenous enzymes such as superoxide dismutase and catalase, which consequently decrease the extent of lipid per-oxidation and cell injury. *Sharpunkha* may also be responsible for increased bile secretion and flow rate.[17,18]

5. ***Phalatrikadi Pachan***

Phalatrikadi Pachana[19] is a classical herbal decoction that includes the herbs *Triphala, Guduchi* (*Tinospora cordifolia*), *Kalmegh/ Bhunimba (Andrograpics panculata),* and *Kutki (Picrorhiza kurroa*). The word *'Pachan'* signifies the main mode of action of the medicine: the digestion and metabolization of *Ama.*

Synergistic Pharmacodynamics: The patho-physiology of *Pittashmari* details how heavy foods, fatty foods exacerbate *Kapha*, which combines with vitiated *pitta* to from a viscous, mucin- rich sludge. *Phalatrikadi Pachan* disrupts this matrix through several mechanisms:

- *Ama-Pachana* and *Srotoshodhana*: The decoction's *Tikta* (bitter) and *Kashaya* (astringent) properties penetrate the *Srotas* (hepatobiliary micro-channels), clearing obstructions by digesting accumulated *Ama* and reducing the (heavy and sticky) qualities of bile, thus liquefying the biliary sludge.
- Choleretic Stimulation: *Kalmegh* (*Andrographis paniculata*) is a hepatoprotective and choleretic agent that promotes high -volume, low- saturated bile secretion. Alongside *Kutki*, it ensures the liver continuously flushes the biliary tract with fresh *Accha Pitta*, acting as a solvent for newly forming cholesterol crystals.

6. ***Varunadi Kashaya:*** *Varunadi Kashya,* described in *Astanga Hridaya Sutrasthana* 15/21-22 under *Varanadi Gana,* possesses predominantly *Kapha-Medohara* and *Dipana- Pachana* properties. In the context of *Ashmari* its possible therapeutic role may be hypothesized through *Lekhana, Bhedana* and *Mutrala* action, facilitating reduction of stone associated accumulation and urinary elimination.

CONCLUSION

This case study looks at the possible value of a structured Ayurvedic treatment programme in the management of chronic calculus cholecystitis *(Pittashmari)* in a patient who had refused cholecystectomy. During a therapy period of two months and twenty-three days, the patient experienced symptomatic improvement, had a 37.7% reduction in the size of the gallstones, and showed normalization of the pancreatic echo texture and duct diameter. These results indicate that organ-preserving, dosha-based Ayurvedic treatments which aim at normalising *Agni* and at disintegrating the calculi might be of benefit in certain patients. Yet, no causal conclusions can be drawn from a single, uncontrolled case. The findings are constrained by the lack of a control group, the possibility of placebo effects, natural fluctuations of the disease, and the short duration of follow-up. For this reason, the report should be regarded as hypothesis-generating and further research using large, well-designed controlled studies is needed in order to establish the efficacy, safety, and wider applicability of this method.

REFERENCES

1. Smeetha Havaragi, N. Uma Srinivas Rao, K. Laxmikantham, P. Srikanth Babu. Role of Ayurveda in the Management of Pittashaya Ashmari (Cholelithiasis). AYUSHDHARA, 2026;13(1):299-303. https://doi.org/10.47070/ayushdhara.v13i1. 2509
2. Zhuang Q, Cheng J, Xia J, Ning M, Wu S, Shen S, Shi Y, Huang D, Dong Z and Wan X (2022) Gypenosides Prevent and Dissolve Cholesterol Gallstones by

Modulating the Homeostasis of Cholesterol and Bile Acids. Front. Med. 9:818144. doi: 10.3389 /fmed.2022.818144

3. Gaikwad, Mayur & Gulhane, Jayant. (2024). An Ayurvedic management of Pittashmari (Cholelithiasis): A Case Study. Journal of Ayurveda and Integrated Medical Sciences. 9. 316-320. 10.21760/ jaims.9.9.51.
4. Ayurvedic Management of Cholelithiasis (Pittashmari)- A Case Study, https://scispace.com/ papers/ayurvedic-management-of-cholelithiasis-pittashmari-a-1ybkmksj5c.
5. Gracy Sokiya et al. trans. 2023. Non-Invasive Ayurvedic Management of Cholelithiasis - A Case Study. AYUSHDHARA. 10, Suppl2 (May 2023), 51–54. DOI:https://doi.org/10.47070/ayushdhara.v10iSuppl 2.1217.
6. Gallstones (Cholelithiasis)- StatPearls- NCBI Bookshelf-NIH, https://www.ncbi.nlm.nih.gov/books /NBK459370
7. Ayurveda Sara Sangraha by Shri Baidyanath, reprint 2009, published by Kadambari printers, Nagpur; 261.
8. Baliga MS, Meera S, Mathai B, Rai MP, Pawar V, Palatty PL. Scientific validation of the ethnomedicinal properties of the Ayurvedic drug Triphala: a review. Chin J Integr Med. 2012 Dec; 18(12): 946-54. doi: 10.1007/s11655-012-1299-x. Epub 2012 Dec 13. PMID: 23239004.
9. Gupta A, Pandey AK. Aceclofenac-induced hepatotoxicity: An ameliorative effect of Terminalia bellirica fruit and ellagic acid. World J Hepatol. 2020 Nov 27; 12(11): 949-964. doi: 10.4254/wjh.v12.i11. 949. PMID: 33312421; PMCID: PMC7701975.
10. Avula B, Wang Y, Rumalla C, Chittiboyina A, Srivastava A, Srivastava K, et al. Chemical Analysis of an Ayurvedic Herbo-Metallic Preparation Containing Mercury: Speciation of Mercury. Planta Med. 2011 Mar 1; 77(05).
11. Shaffer EA, Khandelwal M. 2023. Gallstones (Cholelithiasis). StatPearls. Describes biliary colic as right upper-quadrant pain due to gallbladder contraction against a partially obstructing stone in the cystic duct, often with nausea. https://www. ncbi.nlm.nih.gov/books/NBK459370
12. Kumar A, Singhal T. Scientific Explanation Of Mode of Action of Sutshekhar Ras in Amlapitta with Special Reference to Acid Peptic Disorders: A Review. Int J Res Ayurveda Pharm 2018;9:47–49. https://doi.org /10.7897/2277-4343.095154.
13. Singh D, Mal N, Kumar V, Sharma RP, Pareek P. Scientific explanation of mode of action of Kamadudha Rasa in Amlapitta with special reference to Acid Peptic Disorders: A Review. Journal of Ayurveda and Integrated Medical Sciences 2023;8:99 –105.https://doi.org/10. 21760/ jaims.8.4.17.
14. Chronic Cholecystitis - StatPearls - NCBI Bookshelf 2026. https://www.ncbi.nlm.nih.gov/books/NBK4 70236/. Johnson CD. Upper abdominal pain: Gall bladder. BMJ: British Medical Journal 2001;323: 1170. https://doi.org/10.1136/bmj.323.7322. 1170
15. Sushruta. Sushruta samhita. (Nimbandha sangraha commentary of Dalhanacharya and Nyaya panjika commentary of Gayadasa), Edited by Yadavji Trikamji. Reprint; Chaukamba sanskrita samsthana, Varanasi. Suthrasthana, chapter, 2013; 33: 280
16. Kaiyadeva. Kaiyadeva Nighandu (pathyapathya vibodhika), Edited & translated by Prof. Priyavata Sharma & Dr. Guru Prasad Sharma. Second edition, 2006; 201.
17. Gurmule RK, Sawarkar GR. Evaluation of Sharpunkha's Efficacy in Splenomegaly- A Research Report. Journal of Pharmacy & Bioallied Sciences 2026; 18: S81–S83. https://doi.org/10. 4103/jpbs. jpbs_628_25.
18. Rakshit S, Sahu N, Nirala SK, Gupte SS, Shukla S, Shrivastava S, et al. Tephrosia purpurea (Linn.) attenuates progression of acute liver failure by reducing oxidative stress and inflammation via modulating cytoprotective enzyme hemoxygenase-1 activity. Research Square 2022. https://doi.org/ 10.21203/rs.3.rs-1596610/v1.
19. Vipin Kumar. A Critical Review of Phaltrikadi Kwath wsr to Liver Disorders. WJPMR, 2017,3(6), 100-105.

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