

# WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.453

Volume 14, Issue 11, 984-991.

Case Study

ISSN 2277-7105

# AYURVEDIC MANAGEMENT OF CHOLELITHIASIS -A CASE STUDY

Renuka Sahu<sup>1</sup>\* and Vinayak N. Joshi<sup>2</sup>

<sup>1</sup>PG Scholar, Roga Nidan avum Vikriti Vigyana Dr. D. Y. Patil Vidyapeeth, Pimpri, Pune. 411039.

<sup>2</sup>BAMS, MD (Kayachikitsa) HOD and Guide Dr. D. Y. Patil Vidyapeeth, Pimpri, Pune. 411039.

Article Received on 04 April 2025,

Revised on 24 April 2025, Accepted on 14 May 2025

DOI: 10.20959/wjpr202511-36759



\*Corresponding Author Dr. Renuka Sahu

PG Scholar, Roga Nidan avum Vikriti Vigyana Dr. D. Y. Patil Vidyapeeth, Pimpri, Pune. 411039.

#### **ABSTRACT**

Cholelithiasis (Gallstone formation) is a common in western countries and diet plays a significant role in etiology of stone. In India the incidence is increasing in higher socio-economic group. The disease Cholelithiasis has not been described directly in Ayurvedic classics. The word Ashmari is described only in the context of Ashmari (Urinary calculi). In ayurveda we use term pittashmari (Gallstone). Treatment gallstone is cholecystectomy. cholecystectomy entire gall bladder is removed organ that's why interest for non-surgical treatment is growing rapidly. But there is no any medical management for gallstone in allopathic system. Hence our article is a step in the direction of making an availability of a safe and effective non-surgical management of Cholelithiasis. A 15-year-old male patient reported to OPD Ujjain with the complaints of severe pain abdomen, anorexia, distension of abdomen and vomiting. The patient

was diagnosed as cholelithiasis with physical symptoms and with the help of all investigation. Oral medication capsule *Gallex* (*kokilakshakshar*, *tamrabhasma*) was given to the patient for 2 month a significant response was observed over clinical symptoms and USG report.

KEYWORDS: Cholelithiasis, Gallstone, Pittashmari, Ayurveda, capsule Gallex, Ashmari.

# **INTRODUCTION**

Gall stone is common in western countries and diet plays a significant role in etiology of stone. In India the incidence is increasing in higher socio-economic group. Gallstones are the

www.wjpr.net Vol 14, Issue 11, 2025. ISO 9001: 2015 Certified Journal 984

most common biliary pathology. Women are affected more often than men in the ratio of 4:1. It is said that gallstone is more common in Fat, Fertile, Forty and Females. Composition of gallstone varies considerably. But the majority elements in gallstone are cholesterol, bile pigment and calcium. Gallstone also includes iron, carbonates, phosphorus, protein, cellular debris, mucus and carbohydrates. Galls stones are crystalline bodies formed from the constituents of bile and are made up of varying chemical composition.

- 1. Cholesterol stones -6%- solitary stones.
- 2. Mixed stones 90%-cholesterol, calcium bicarbonate, calcium phosphate calcium carbonate and protein. Multiple stones
- 3. Pigment stones composed of calcium bicarbonate small black and multiple.

Pathogenesis of stone- Mainly there are four factors which contributes to the formation of gallstones. These are;

- 1. Metabolic factor,
- 2. Reflux factor
- 3. Stasis factor and
- 4. Infective factor.

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 *Ashmari* (urinary calculi). 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 *Pittashmari*.<sup>[2]</sup> Hence this case study was considered with the aim to describe the potentiality of *Ayurvedic* drugs in the management of cholelithiasis.

#### **Aetiology**

#### 1. Metabolic causes

Cholesterol is produced from the liver which gives rise to bile acids. Normal ratio of bile
acids: chole - terol is 25: 1. This ratio is necessary to maintain the cholesterol in liquid
form by forming micelles. When the ratio drops down to 13: 1, this is called critical ratio
at which the cholesterol gets precipitated.

#### 2. Infection

• It is the most common cause responsible for a gall stone in 80% of patients. Sources of infection are tonsils, tooth, bowel, etc. Organisms such as E. coli, Proteus, anaerobic

organisms, Streptococci, etc., through the blood stream reach the gall bladder wall and form a focus/nidus around which cholesterol and bile salts get precipitated, Over a period of many years, this results in a mixed stone. They are usually multiple and occur in an infected bile.

#### 3. Bile stasis

 Pregnancy, oestrogens, following vagotomy and prolonged TPN (Total Parenteral Nutrition).

They are prone for mixed stones as a result of bile stasis.

# 4. Haemolytic anaemia

Examples: Hereditary spherocytosis, sickle cell anaemia, etc.

Because of increased break down of RBC's, the bilirubin production is increased. Since the production is more, they cannot conjugate with glucuronic acid, which is produced at normal levels.

Such unconjugated bilirubin combines with the calcium and is excreted in the biliary tree resulting in calcium bilirubinate stones (Pigment stones) not only in the gall bladder, also in the entire ductal system.

# 5. Saint's triad

- 1. Gall stones
- 2. Diverticulosis of colon
- 3. Hiatus hernia

#### 6. Parasitic infestation

In oriental countries, Clonorchissinensis (Chinese liver fluke) infestations can cause stone in biliary tree. Ascarislumbricoides in the biliary tree may produce stones in our country (India).

#### 7. Due to abnormal mucus

It is produced in congenital cystic fibrosis, gall stones occur in these children due to impairment of bile flow.

# **CASE REPORT**

A Hindu, unmarried, 15 years old male patient visited to the OPD in Ujjain, MP for the complaints of severe pain abdomen, distension of abdomen and vomiting.

**History of the present illness:**- patient was asymptomatic 6 months back. One fine day he suddenly noticed pain in the right side of the abdomen .It was not radiating in nature, he had distension of the abdomen, vomiting and anorexia. He went to allopathic hospital where USG abdomen and pelvis was advised and it has been diagnosed as Gall bladder stones which was single and 8-9mm in size and advised surgery for the same. As he was not willing to do surgery, he consulted *Ayurvedic* physician and taken treatment for the same.

## **Personal history**

**Food habit:**- The patient had taken a mixed diet

Appetite:- Reduced appetite,

Sleep:- Good sleep

**Urine:**- Frequency of micturition 4-5 times at Day 2-3 times at Night

**Addiction:-** The patient had no addiction.

# Systemic examination of the patient

**P/A** - On Inspection: Mild Distension of the abdomen observed.

On Palpation: Severe tenderness noted over right hypochondriac region.

USG impression: Cholelithiasis (8-9 mm calculus impacted in GB neck)

The following treatment protocol was followed

Capsule *Gallex* was given for 2 month. in *gallex* there were *kokilakshakshar* 400 mg and *tamrabhasma* 100 mg in *gallex* tablet.

These medications were continued for 2 month and follow up visits, symptoms were assessed.

**Total duration**: 2 month

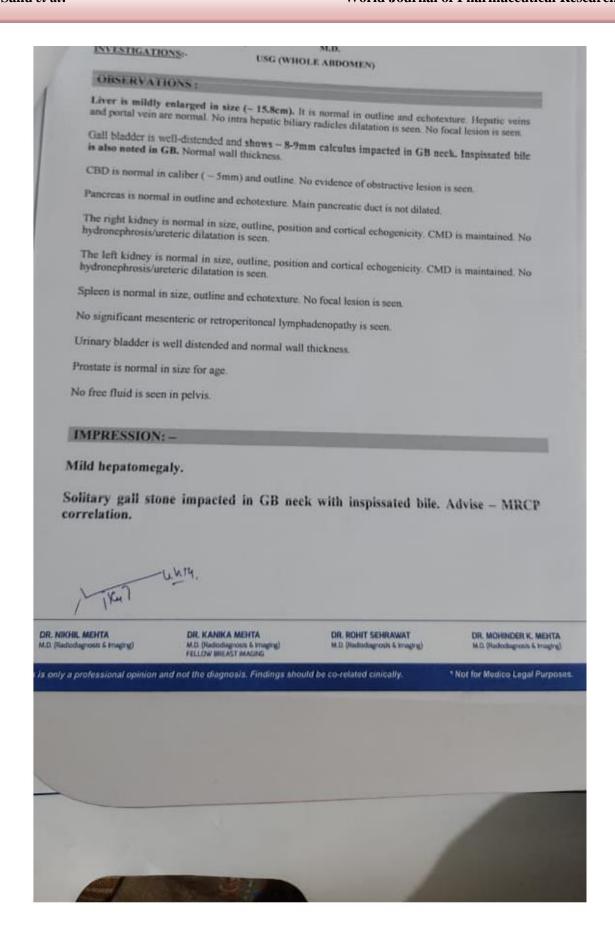
#### **RESULTS**

### **OBSERVATION AND RESULTS - NO. 1**

Symptom	Before treatment	After treatment
Pain abdomen	Severe	nil
Anorexia	Present	absent
Distension of abdomen	Mild	no
Vomiting	1-2 episodes after food	no

**USG** report before Treatment – NO. 2

987



USG after Treatment - NO. 3

#### OBSERVATIONS:

Liver is normal in size, outline and echotexture. Hepatic veins and portal vein are normal. No intra hepatic biliary radicles dilatation is seen. No focal lesion is seen.

Gall bladder is well-distended and shows normal wall thickness.

CBD is normal in caliber (~ 5mm) and outline. No evidence of obstructive lesion is seen.

Pancreas is normal in outline and echotexture. Main pancreatic duct is not dilated.

The right kidney is normal in size, outline, position and cortical echogenicity. CMD is maintained. hydronephrosis/ureteric dilatation is seen.

The left kidney is normal in size, outline, position and cortical echogenicity. CMD is maintained hydronephrosis/ureteric dilatation is seen.

Spleen is normal in size, outline and echotexture. No focal lesion is seen.

No significant mesenteric or retroperitoneal lymphadenopathy is seen.

Urinary bladder is well distended and normal wall thickness.

Prostate is normal in size, outline and echotexture. No focal lesion is seen.

No free fluid is seen in pelvis.

# IMPRESSION: -

Normal study.

#### **DISCUSSION**

According to Ayurveda, the patient was diagnosed as a case of Pittashmari with predominant Kapha and Vata Dosha. Excessive increase of Pitta (Caused by hot, spicy food, alcohol etc.) creates the basis for stone formation. Kapha increased by fatty, heavy foods mixes with Pitta and produces a highly sticky mixture. Vata dries this mixture and moulds it into shape of a stone. Ayurvedic treatment eliminates the need for surgery by assisting the body to expel the stones naturally. The clinical presentation is characterized by pain in abdomen, anorexia, distension of abdomen and vomiting. Hence the line of treatment mainly includes Shoolahara (Pain reliving), Shothahara (Anti-inflammatory), Deepana-Paachana (Appetizer and carminative), Agni Deepaka (Appetizer) and Ashmari Bhedaka (helps to eliminate calculi).

Tamrabhasma:- RASA (Taste), KASAYA (Astringent), MADHURA (Sweet), TIKTA (Bitter), AMAL (Sour)

GUNA (Main Quality):- LAGHU (Light), RUKSHA (Dry), TIKSHNA (Sharp)

World Journal of Pharmaceutical Research

Sahu et al.

VIRYA (Potency):- USHNA (Hot)

*VIPAKA* (Resultant):- *KATU* (Pungent)

Dosha karma

Tamrabhasma mainly reduces Kapha Dosha. It detoxifies Pitta Dosha. It promotes a proper

flow of *Pitta Dosha* due to its cholagogue action. Due to this action, it also pacifies *Pitta* 

Dosha. It has Lekhana, Chhedana, Bhedana, Deepana, Paachana, Vedanaasthaapana and

Kaphashaamaka properties.

Kokilaksha

Madhura and Tikta rasa cause Pittashamaka and Amla rasa causes Vatashamana thereby,

reduces daha and vedana respectively. Pichchila, Sheeta and Snigdha guna cause

Vranaropanaand Khara guna of Vayu which is responsible for cumulative consolidation is

countered by Pichchila and Snigdha guna. Madhuravipaka is responsible for Vata-pitta

shamana thereby, it reduces specially vedana and daha.

Kshar

Kshara which possesses properties like chedana, lekhana, bhedana and mutrala for

facilitating the disintegration of urinary stones. Kshara having properties of tridoshagna,

bhedana, chedana, lekhana acts on compact molecules of stones and causes fragility which

helps in fragmentation. Darana property of Kshara will helps in breakage of stone. Vilayana

property of *Kshara* helps in dissolution and slow fragmentation of stone.

This kshar it acts as anti-inflammatory property and thereby reduce hepatobiliary obstruction.

**CONCLUSION** 

In this case study, the patient has shown encouraging results during the management of

Cholelithiasis (*Pittashmari*). As per the USG abdomen, the patient got rid of 9mm stone

within 2 months of treatment and the general condition of the patient also improved.

Therefore, on the basis of observation and results of this case study it can be inferred that

Gallex capsule Prayogahas shown marked improvement.

**REFERENCES** 

1. Jameson, Harrison's Principle of Internal Medicine Edition, United States of America,

The McGraw-Hill companies, Inc, 1777: 2, 15.

- 2. Sushrutha, Sushrutha Samhitha, Nibandha Sangraha commentory by Dalhana, Edition, Ed by Vaidya Yadavji Trikamji, Nidanasthana, chapter Varanasi, Chaukhamba Surbharati Prakashan, 278, 5: 3-9.
- 3. Nageendas Chaganlal Shah, *Bharata Bhaishajya Ratnakara*, *Aakaradi Rasa Prakarana*, *Prathama Bhaga*, *Jain* Publishers, Verse no. Edition, New Delhi, 154: 448-3.
- 4. *Govinda dassena, Bhaishajya Ratnavali, Vidyotini* commentary *by Ambika dutta shashtri, Ashmari Chikitsa Prakarana*, Verse Varanasi. *Chaukhambha Prakashan*, 2021; 3: 712.
- 5. Sharangadhara, Sharangadhara Samhitha, Gudartha Deepika commentary by Adhamalla, Purvakhanda, Chapter, Chaukhambha Orientalia, Varanasi, 4, 5: 35.
- 6. Sadananda Sharma, *Rasatarangini*, Chapter, Verse, Edited by Pandith Kashinath Shastri, Delhi, Motilal Banarasidas, 2009; 308: 13-6.

991