

## A Case Study - Cholecystectomy with choledochododenostomy in cholelithiasis and choledocholeliathiasis with obstructive jaundice

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### ABSTRACT:

Cholelithiasis (gall stone disease) involves the presence of gall stone which are concretions that form in the biliary tract.usually in the gall bladder.Gall stone constitutes a significant health problem in developed societies,affecting 10% to 15% Of adult population .In choledocholelithiasis presence of stones within the Common bile duct.It is estimated that Common bile duct stones are present anywhere from 1-15% of patient with cholelithiasis.In present day treatment for Bile duct stone is ERCP.Ayurvedic texts it was found that the bile secrete from gall bladder can be correlated with Accha pitta mentioned in ayurveda due to similarity in vitiation and function.the pathogenesis of disease occurs due to abnormal formation of kapha during process of digestion and it's vitiation due to vata.

**Key word:** cholelithiasis, Pittashmari, choledocholeliathiasis, cholecystectomy & ERCP.

### I. INTRODUCTION:

The presence of stones in the gallbladder is referred to as cholelithiasis, from the greek chol - (bile), lith - (stone) and iasis- (process). The term cholelithiasis may refer to the presence of gallstones or to the diseases caused due to gallstones. Gallstones are the most common disorder affecting the biliary system.(1) The true prevalence rate is difficult to determine because calculous disease can often be asymptomatic .There is a high variability regarding the worldwide prevalence of cholelithiasis. High rates of incidence occur in the United States, Chile, Sweden, Germany and Austria. Asian populations appear to have the lowest incidence of gall stone disease. (2) Most people with gallstones (80%) never have symptoms .The clinical presentations can vary from dyspepsia to severe forms such as pancreatitis and perforation of the gall bladder 3. Female sex, Obesity, Maturity onset diabetes and age greater

than 40 are said to be the main risk factors involved in cholelithiasis. (3)

An Ayurvedic outlook of cholelithiasis primarily focuses on the phenomenon of Ashmari. Though directly Ashmari told in Ayurveda cannot have any correlations with cholelithiasis, a broad idea on the formation of gall stones and its chikitsa (treatment) can be understood.(4)

### Historical Riview:

Vedas are the most established composed tributes accessible to humanity on this planet. A lot of therapeutic uses have been identified in these bonafide writings. Be that as it may, there is no depiction of Kshara in Vedic writing. In Upanishada, the utilization of word Kshara is found yet nothing has been depicted in detail. Just Sushruta has devoted a part to Kshara. He has described Kshara considering its extension in ShalyaTantra because of its characteristics like Chhedana,Bhedana, Lekhana and so on.(5) Thus, in the time of Samhita, Charaka has managed definition, assortments, properties and utilization of Kshara. Charaka has referenced two sorts of Kshara arrangement. In first section of general properties and unfavourable impacts of Kshara are mentioned. He has likewise indicated that Kshara doesn't have a solitary Rasa, however it has numerous Rasas in light of the fact that it is a Dravya arranged from different medications and comprise all rasas with the exception of Amla rasa.(6) Aside from that, in careful depiction Sushruta Samhita clarified the word 'Ksharana' as one which prepares and evacuates the disfigured substance, skin and so forth and furthermore expels the vitiated Doshas from their area.(7)

### MODERN REVIEW :

#### Types of gall stones:

Cholestrol stone - are 6% common, often solitary. Mixed stones- are 90% common. It

contains cholesterol, calcium salts of phosphate, carbonate, palmitate, proteins and are multiple faceted. Pigment stones – are small, black or greenish black, multiple, often they can be sludge like.(8)

#### **Etiology:**

Metabolic causes- increased cholesterol secretion is a main cause in formation of gall stones. Obesity, high caloric diet and medications are the primary reasons for the increased secretion of cholesterol. (9)

1. Infection- It is most common cause responsible for gall stone in 80% of patients. Sources of infection are tonsils, tooth, bowel etc.
2. Bile stasis- Pregnancy, oestrogens following vagotomy and prolonged total parental nutrition are associated with bile stasis.
3. Haemolytic anemia
4. Parasitic infestations

#### **Clinical features/ effects of Gallstones:(10)**

- Silent asymptomatic stones occur in majority of the cases.
- Biliary colic with periodicity, severe within hours after meal. Biliary colic is spasmodic in nature often severe in right upper quadrant and epigastrium radiating to chest, upper back and shoulder.
- Fever
- Acute cholecystitis, Chronic cholecystitis, Empyema gallbladder perforation causing biliary peritonitis or pericholecystic abscess, Mucocele of Gallbladder, Carcinoma gallbladder may occur as a complication. (11)

#### **Ayurvedic Review:**







The word Ashmari is derived from the word “Ashma” which means a stone or a pebble. This condition is related to the Mutravahasrotas (urinary system). The main nidanas of Ashmarias stated by Acharya sushruta are Asamshodhanasheela (not undergoing purificatory therapies) and apathyasevana (unhealthy food and activities). They are said to be of 4 kinds Vataja, Pittaja, Kaphaja and shukraja. The formation of ashmari has been beautifully explained by Acharya vagbhata with the help of

upamanpramana(analogy) that slowly ashmari gets formed just like the formation of pebbles of gall from the bile of the cow or like slush formation even in clean water. The involvement of vata is mandatory for the production of ashmari as vata causes the shoshana(dryness) of mutra. This vata could be associated with the pitta, kapha or shukra based on which different types of ashmaris are formed. The lakshanas(features) of ashmari include pain in the area of nabhi(umbilicus), basti (bladder), sevani(raphae) and other areas nearby during micturation and other symptoms related to mutapravartana. The doshajaashmar is have respective characteristics. The calculus produced due to kapha is white in colour, unctuous big like a hen’s egg and similar tomadhuka flower in colour. Pittajaashmari is slightly red (rakta), yellowish (peetha) or black (Krishna) and resembles the seed of bhallataka or madhu(honey) in colour. Vatajaashmari is shyava(brown), parusha(coarse), vishama(uneven), khara(hard) covered with projections similar to that of kadamba flower. (13)

#### **Case presentation:**

A 71 year male Patient presented with complains of pain in abdomen at right hypochondriac and epigastric since 1 month on clinical examination there was tenderness at right hypochondriac region. Murphys sign was positive. There was no abdominal distension, guarding, Rigidity and the pulse 80/min Bp 130/80mmhg. cvs -S1S2 Normal. chest was B/L lower lobe mild crepts and patient was conscious oriented. patient had Known case of Hypertension since 10yr on regular tab amlodipine 5mg 1 OD. In USG multiple calculi are seen in gall bladder with largest size 12mm. A calculus of size 10mm is seen in proximal CBD causing dilatation of distal CBD and CHD, LHD And RHD, IHBR. The CBD dilated measures 11 mm. CBD calculus causing obstructive changes with cholelithiasis.

During ERCP finding’s wear Cholangitis with choledocho-eliathiasis with CBD stricture. Then after patient was taken for cholecystectomy with choledodudenostomy ( end to end Anastomosis) finding’s wear cholangitis, stricture at proximal CBD multiple calculi in CBD.

   	<p style="text-align: center;"><b>ERCp</b></p> <p><b>Premedication:</b>        SVE passed upto D2. Papilla normal.        Selective cannulation of CBD done with guidwire, pus came+        Cholangiogram revealed dilated CBD with IHBRD with multiple filling defect of avg size 1 cm.        Biliary sphincterotomy done.        Biliary Sphincteroplasty done at 3 atm pressure.        Multiple balloon sweeps tried but due to narrowing could not be cleared        10 Fr x 10 cm plastic CBD stent placement done.</p> <p><b>IMP :</b> ERCp with cholangitis with choledocholithiasis with sphincterotomy with CBD stenting done</p> <div style="text-align: right; margin-top: 20px;">         Dr. Sunil Pawar     </div> <div style="text-align: right; margin-top: 40px;">         Dr. Sunil Pawar        M.D., D.M., D.N.B.     </div>
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MR No-512646  
 Friday, March 11, 2022  
 Mr. Jaysing Amruta Samgir  
 C/o. Dr. of Sano Guruji Rughnalaia  
 USG done on - ALOKA PROSOUND α 6 LT  
 Age & Sex- 71 yrs. M

**Abdominal USG Screening**

The liver is normal in size, shape and echotexture. No obvious focal lesion noted. The portal and hepatic veins show normal size and course.

**The gall bladder is distended. Multiple calculi are seen in it, largest of size 12mm. Sludge is seen in gall bladder. A calculus of size 10mm is seen in proximal CBD causing dilatation of distal CBD, CHD, LHD, RHD & IHBR. The CBD is dilated, measures 11mm.**

The pancreas is normal in size and shape. No dilatation of pancreatic duct noted. No c/o peripancreatic collection.

The spleen is normal in size, shape and echotexture. No c/o Focal lesion.

Both kidneys are normal in size, shape and position. The corticomedullary differentiation is maintained on both sides. No c/o hydronephrosis or calculi on either side.

**The urinary bladder is distended with thickened & irregular wall. Pre void volume is 210cc & post void volume is nil.**

**The prostate is enlarged in size & shape & volume is 31cc.**

Bowel loops are normal in caliber and shows peristaltic movements. No obvious bowel abnormality detected on sonography at present study.

No c/o free fluid is seen in peritoneal cavity. No pre, para-aortic or caval lymphadenopathy noted.

**\*\*\* CBD calculus causing obstructive changes with Cholelithiasis. Enlarged prostate.**

Thanks,

## II. DISCUSSION:

Gall stone are most prevalent gastrointestinal disorder which is prevalent 10% to 15% of adults in developing countries. This condition may be asymptomatic but sometimes it become symptomatic and it may need treatment including surgical treatment.

Here in this case patient observed the symptoms of pain in right hypochondriac region nausea, vomiting . The diagnostic criteria consisting of complete physical examination and laboratory evaluation other investigation then cholecystectomy with choledodudenestomy adviced to the patient. Reports of abdominal ultrasound and liver function test and ERCP it is evidence of gallstone.In gastroenterology diseases cholelithiasis is one of most common disease to diagnose.On patient verbalization of pain in epigastric region or right hypochondriac region nausea vomiting increases the susceptibility towards the cholelithiasis these are only symptoms which are significantly associated with gallstones.

## III. CONCLUSION:

Cholecystitis with choledocholithiasis with obstructive jaundice can be treated surgically ,early diagnosis and treatment is needed to avert complication .A cholecystectomy relieve the pain and discomfort of gallstones. In this case a cholecystectomy prevent gallstones formation again.

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