

10. CHOLELITHIASIS

Gallstones are stones present in the gall bladder and in the biliary tree. Gallstones may be silent or give rise to problems if it obstructs the flow of bile or associated with co-morbid conditions like diabetes in the elders. Gallstone may be single (solitaire) or multiple. Asymptomatic solitary stone found in the incidental USG does not require treatment. Multiple small migrating and obstructing stone only produces problem.

Types of stones

- ◆ Cholesterol, black pigment and brown pigment stones

Causative factor – Metabolic, Infective, Stasis of bile

Associated Disorder – Diverticulosis of colon, Hiatus Hernia (Saint's Triad)

Complications

- ◆ Acute cholecystitis
- ◆ Chronic cholecystitis
- ◆ Mucocele
- ◆ Carcinoma

In the bile duct – Obstructive jaundice
Cholangitis
Acute pancreatitis

In the intestine – Acute intestinal obstruction
Gall stone ileus

Calculous cholecystitis

Symptoms are either due to obstruction of the bladder neck by a stone or inflammation of the gall bladder.

Right hypochondrial pain – Colicky in nature
Radiating to shoulder
Pain during deep inspiration (Murphy's sign)
Nausea, Vomiting.

Flatulent dyspepsia
Fullness after food
Belching
Heart burn

Diagnosis
USG – whole abdomen
LFT
HIDA scan

Complications

- ◆ Infection
 - ◆ Mucocele
 - ◆ Pyocele
 - ◆ Perforation ——— Local Abscess
Peritonitis
- Causative organisms are
- ◆ E- coli
 - ◆ Klebsiella
 - ◆ Strepto coccus faecalis
 - ◆ Salmonella

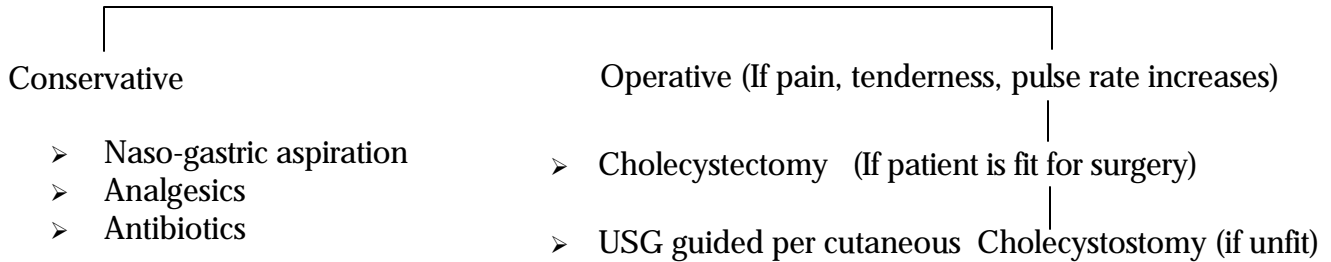
Features pain / tenderness / Rigidity

Treatment

Medical

- ◆ Analgesics
- ◆ Antispasmodics
- ◆ Anti emetics
- ◆ Low fat diet
- ◆ Dissolution therapy by bile acids (Ursodeoxycholic acid, Chenodeoxycholic acid)

Surgical



Acalculous cholecystitis

Causes

- ◆ Cholesterosis
- ◆ Adenomyomatosis
- ◆ Typhoid gallbladder
- ◆ Polyposis
- ◆ Cholecystitis glandularis proliferans.

Treatment

Cholecystectomy / chole cystostomy

- ◆ Open
- ◆ Laparoscopic
- ◆ Lap Cholecystectomy

Intraoperative golden rule

- Identification of colon / pylorus/ duodenum
- Calot's triangle

Indications for choledochotomy

Indications for choledochotomy at cholecystectomy, if facilities of ERCP / Peroperative cholangiography / MRCP is not available.

- ◆ Stones in the ducts
- ◆ H/o Jaundice, rigor, fever, pruritis – charcot's triad.
- ◆ Dialated CBD > 1cm
- ◆ Abnormal liver function test with raised alkaline phosphatase.

Laparoscopic cholecystectomy

In tertiary care hospitals laparoscopic cholecystectomy is easily performed in elders, caution to be exercised in producing pneumoperitonium and in positioning the elderly patient.