**Pathology/ 4th class**

**Cholecystitis**

Cholecystitis or inflammation of the gallbladder may be acute, chronic, or acute superimposed on chronic. Though chroniccholecystitis is more common, acute cholecystitis is a surgicalemergency.

**Acute cholecystitis**

Acute cholecystitis is a acute diffuse inflammation of the gallbladder.. The condition usually begins with obstruction, followed by infection later.

**Etiopathogenesis**

 Based on the initiating mechanisms, acute cholecystitis occurs in two types of situations—**acute calculous**and **acute acalculouscholecystitis**.

-**Acute calculous cholecystitis**: In 90% of cases, acute cholecystitis is caused by obstruction in the neck of the gall bladderor in the cystic duct by a gallstone. Obstruction results in distension of the gallbladder followed byacute inflammation which is initially due to chemical irritation.Later, however, secondary bacterial infection, chiefl y by E. coliand Streptococcus faecalis.

-**Acute acalculouscholecystitis**: The remaining 10% cases of acute cholecystitis do not contain gallstones. In such cases, avariety of causes have been assigned such as previous nonbiliarysurgery, multiple injuries, burns, recent childbirth, severesepsis, dehydration, and diabetesmellitus. Rare causes include primary bacterial infection likesalmonellosis and cholera and parasitic infestations.

**Clinical features**

The patients of acute cholecystitisof either type have similar clinical features. They present withsevere pain in the upper abdomen with features of peritonealirritation.

**Chronic cholecystitis**

Chronic cholecystitis is the commonest type of clinical gallbladder disease. There is almost constant association ofchronic cholecystitis with cholelithiasis.

**Etiopathogenesis**

 The association of chronic cholecystitis with mixed and combined gallstones is virtually always present. However, it is not known what initiates theinflammatory response in the gallbladder wall. Possibly,

supersaturation of the bile with cholesterol predisposes to both gallstone formation and inflammation. In some patients,repeated attacks of mild acute cholecystitis result in chroniccholecystitis.

**Malignant tumors**

Primary carcinoma of the gallbladder is more prevalent than other cancers of the extrahepatic biliary tract. Like cholelithiasisand cholecystitis, it is more frequent in women than in men (ratio 4:1) with a peak incidence in 7th decade of life. It mayremain undetec ted until the time it is widely spread and renderedinoperable.

**Etiology**

 A number of etiologic factors have been implicated.

1. **Cholelithiasisand cholecystitis** :- The most significant association of cancer of the gallbladder is with cholelithiasisand cholecystitis. Cholelithiasis and cholecystitis are present in about 75% cases of gallbladder cancer.

2. **Chemical carcinogens**:- A number of chemical carcinogens structurally similar to naturally-occurring bileacids have been considered to induce gallbladder cancer.These include methyl cholanthrene, various nitrosamines .

3. **Genetic factors**:- There is higher incidence of cancer of the gallbladder in certain populations living in the samegeographic region suggesting a strong genetic component inthe disease.

4. **Miscellaneous**:- Patients who have undergone previous surgery on the biliary tract have higher incidence of subsequentgallbladder cancer. Patients with inflammatory bowel disease (ulcerative colitis and Crohn’s disease) have high incidence ofgallbladder cancer.

**Clinical features:-** Carcinoma of the gallbadder is slow growing and causes symptoms late in the course of disease.