

- RUQ pain is a common symptom of biliary tract disease
- epigastric pain is predominant symptom in up to 60%
- radiation to the left upper back is more commonly associated with biliary tract disease than other upper GI pathology
- pain usually begins between 9pm and 4am & persists beyond 6 hrs

- nausea, vomiting & anorexia are seen
- fevers and chills are not uncommon

- pain progresses from dull, poorly localised mid-upper abdominal pain to sharp, well-localised mid-upper abdominal pain

- moderate to severe distress
- signs of systemic toxicity
- tender RUQ with evidence of localised peritoneal irritation, distension & hypoactive bowel sounds
- Murphy's sign is 97% sensitive for acute cholecystitis
- volume depletion is common
- jaundice is seen with prolonged obstruction or haemolysis

1. bloods:

- chronic anaemia may be seen in pigment stones due to haemolysis
- WCC, bili and LFTs are often normal
- amylase should be obtained to exclude pancreatitis
- bHCG

2. X-rays:

- 10-20% of stones are visible on AXR
- CXR can be used to exclude RLL pneumonia

3. 12 lead ECG to exclude MI

4. USS has a sensitivity of 94% and a specificity of 78%

1. iv fluids
2. NBM
3. pain control (opioid analgesia)
4. antiemetics
5. antibiotics
 - single agent therapy with 3rd generation cephalosporin in non-septic patients
 - triple therapy in obviously infected patients
6. cholecystectomy

symptoms

signs

cholecystitis

investigations

definition

- acute cholecystitis involves mechanical, chemical & infectious factors
 - increased intraluminal pressure culminates in visceral ischaemia
 - chemical inflammation with release of lysophosphatidylcholine, phospholipase A & prostaglandins results in direct mucosal injury
 - bacteria are involved in 50-80% of patients
 - acalculus cholecystitis occurs in 5-10% of patients with acute cholecystitis
 - acalculus cholecystitis tends to have a more severe and malignant course
- complications include pancreatitis, ascending cholangitis, gallbladder empyema, emphysematous cholecystitis (gallbladder gangrene)

risk factors include:

- increasing age
- female sex
- parity
- obesity
- diabetes
- profound weight loss
- fasting
- cystic fibrosis
- malabsorption syndromes
- various medications (OC & clofibrate)
- family tendency

pigment stones are associated with:

- Asian descent
- chronic biliary tract disease
- parasitic infection (Ascaris)
- chronic liver disease (particularly related to ETOH)
- chronic intravascular hemolysis
- hepatitis

bacterial pathogens involved include:

1. enterobacteriaceae (70%) - E. coli, Klebsiella
2. enterococci (15%)
3. bacteroides (10%)
4. Clostridium (10%)
5. group D Strep & Staph

acalculus cholecystitis is associated with:

- multiple trauma
- extensive burn injury
- prolonged labour
- major surgery
- vasculitis