**BILIARY DISEASE**

**Cholelithiasis and Biliary Colic**

Colic results from transient cystic duct blockage from impacted stones. Risk factors include the 4 F’s—Female, Fat, Fertile, and Forty—but the disorder is common and can occur in any patient. Other risk factors include OCP use, rapid weight loss, a positive family history, chronic hemolysis (pigment stones), small bowel resection, and TPN.

**History/PE**

- Patients present with postprandial abdominal pain (usually in the RUQ) that radiates to the right subscapular area or the epigastrium.
- Pain is abrupt, followed by gradual relief, and often associated with nausea and vomiting, fatty food intolerance, dyspepsia, and flatulence.
- Gallstones may be asymptomatic in up to 80% of patients. Examination may reveal RUQ tenderness and a palpable gallbladder.

**Diagnosis**

- Plain x-rays are rarely diagnostic; only 10–15% of stones are radiopaque.
- RUQ ultrasound may show gallstones (85–90% sensitive).
- Consider an upper GI series to rule out a hiatal hernia or ulcer.

**Treatment**

- Cholecystectomy is curative and can be performed electively.
- Patients may require preoperative ERCP for common bile duct stones.
- Treat nonsurgical candidates with dietary modification (avoid triggers such as fatty foods).

**Complications**

Recurrent biliary colic, acute cholecystitis, choledocholithiasis, acute cholangitis, gallstone ileus, gallstone pancreatitis.

**Acute Cholecystitis**

Prolonged blockage of the cystic duct, usually by an impacted stone → obstructive distention, inflammation, superinfection, and possibly gangrene of the gallbladder (acute gangrenous cholecystitis). Acalculous cholecystitis occurs in the absence of cholelithiasis in chronically debilitated patients, those on TPN, and trauma or burn victims.

**History/PE**

- Patients present with RUQ pain, nausea, low-grade fever, and vomiting. Symptoms are typically more severe and of longer duration than those of biliary colic.
- RUQ tenderness, inspiratory arrest during deep palpation of the RUQ (Murphy’s sign), low-grade fever, leukocytosis, mild icterus, and possibly guarding or rebound tenderness may be present on examination.

**Diagnosis**

- CBC, amylase, lipase, and an LFT panel should be obtained.
- Ultrasound may demonstrate stones, bile sludge, pericholecystic fluid, a thickened gallbladder wall, gas in the gallbladder, and an ultrasonic Murphy’s sign (see Figure 2.6-1).