Acute Pancreatitis

General Considerations

80-95% have mild to moderate course with full recovery with supportive care only. 10-15% experience acute haemorrhagic or necrotizing pancreatitis with considerable associated morbidity and mortality.

Etiology

Gallstones and alcohol account for 90%. Remainder include hyperlipidaemia, hypercalcemia, trauma, pancreatic duct obstruction, ischemia, drugs, infection, and others.

Clinical Presentation

First episode is usually the worst. >90% experience abdominal pain, usually constant mid epigastric pain with maximal severity within several hours of onset. Nausea and vomiting usually accompany the pain. Physical exam may reveal epigastric tenderness, abdominal distention, fever, tachycardia, and possibly a palpable epigastric mass. Severe haemorrhagic pancreatitis may present with Grey-Turner's Sign (left flank ecchymosis) or Cullen's Sign (periumbilical ecchymosis).

Diagnosis

Amylase elevated in 90%, with increase occurring within 24 hours of onset, and gradual return to normal within 5-7 days. Lipase is more specific but less sensitive. Dynamic CT scan reveals areas of pancreatic haemorrhage and necrosis. Ultrasound useful to rule out cholelithiasis and pseudocyst. Avoid ERCP.

Prognosis

Ranson's criteria commonly used:

* At admission: age >55 years, WBC>16,000, glucose>200, LDH>350, SGOT>250.
* During initial 48 hours: Hct decrease >10, BUN increase > 5, Ca<8, paO2<60, base deficit >4, fluid sequestration > 6 l. Approximate mortality: <3 signs=1%, 3-4 signs=15%, 5-6=50%, >6=~100%.

Therapy

IV fluids, keep NPO. Surgery reserved for treatment of complications (abscess, pseudocyst), uncertainty of diagnosis, or progressive deterioration. Cholecystectomy recommended for gallstone pancreatitis after acute attack subsides, during same hospitalization.

Source: Povoski, SP, "The Pancreas", in The Mont Reid Surgical Handbook, 3rd Edition.