Subject: **ACUTE PANCREATITIS**

Original Date: October 2003

DEFINITION: Acute, inflammatory, autodigestive process of the pancreas

**SUBJECTIVE**

- Epigastric abdominal pain
- Pain may radiate to the back or to the right or left
- Usually has an abrupt onset, steady and severe, is worsened by walking or lying supine
- Pain may be alleviated by knee-to-chest position, leaning forward, or sitting
- Nausea and vomiting
- Precipitating factors
- Medications associated with pancreatitis
- Past Medical History/Past Surgical History
- Substance Abuse History

**OBJECTIVE**

- Vital Signs
- Epigastric tenderness and guarding
- Absent or hypoactive bowel sounds, distention (secondary to ileus)
- Fever
- Tachycardia, hypotension, cool/pale skin
- Tachypnea, decreased breath sounds (secondary to pleural effusion)
- Jaundice
- Steatorrhea
- Ascites
- A right upper quadrant mass may be palpated
- If intra-abdominal bleeding is present (hemorrhagic pancreatitis)-flank discoloration (Grey Turner’s sign) and/or umbilical discoloration (Cullen’s sign)
Diagnostic Tests

- Elevated amylase (> 4 times normal) and lipase levels.
- Elevated urine amylase level
- CBC-Leukocytosis (10,000-30,000/u/L)
- Hematocrit may be elevated initially
- CMP-Hyperglycemia
- Calcium and Prealbumin
- Elevated BUN (usually secondary to dehydration)
- AST and LDH may be elevated secondary to tissue necrosis
- Bilirubin and alkaline phosphatase levels may be increased as a result of common bile duct obstruction
- Hypocalcemia (< 7 mg/dL) in severe disease
- Abdominal film may show ileus, pancreatic calcifications, gallstones

ASSESSMENT

- PUD
- Acute cholangitis, biliary colic
- High intestinal obstruction
- Early acute pancreatitis
- Mesenteric vascular obstruction
- DKA
- Pneumonia
- MI
- Renal colic
- Ruptured or dissecting aortic aneurysm

PLAN

- Assess patient
- Notify MD
- Refer to EGS acute pancreatitis protocol
- NPO and Bowel Rest
- Consider banana bag
- Consult MD regarding needs for TPN
- Demerol is preferred (75-150 mg IM q3-4h) or Toradol 60 mg IM/IV then 15-30 IM/IV 16h prn pain or PCA
- IV fluids LR, NS, D5NS at 75-100 mL/h
- NGT with low intermittent suction for ileus or vomiting
- Monitor calcium levels and replace: refer to EGS electrolyte replacement protocol
- Refer to EGS antibiotic protocol
- Consult MD regarding needs for Insulin in cases of hyperglycemia: refer to hyperglycemia and insulin protocols
• Consult with MD regarding needs for surgery in selected cases: gallstones, perforated peptic ulcer, need for excision of drainage
• Refer to EGS substance abuse protocol
• If patient does not improve with traditional treatment, notify MD.
• Update MD

GENERAL INFORMATION:

1. Contrast-enhanced CT scan is superior to ultrasound in defining the extent of pancreatitis and in diagnosing pseudocyst, necrosis, and fistula.
2. Prognosis: signs at admission or diagnosis- more than 55 years of age, WBC > 16,000/uL, Blood glucose > 200 mg/dL, LDH > 350 IU/L, AST > 250 IU.
3. If pancreatitis is secondary to biliary obstruction, stent placement via ERCP may be used to decrease recurrent episodes

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