Ochsner Children's Hospital

ACUTE PANCREATITIS

Inclusion Criteria

- Acute abdominal pain
  PLUS
- Amylase or lipase > 3x the upper limit of normal
  OR
- Any imaging suggestive of pancreatic inflammation

Exclusion Criteria

- Known gallstone pancreatitis
- Diabetic ketoacidosis
- Underlying metabolic disease

*** PLEASE SEE PAGE 2 FOR ADDITIONAL CONSIDERATIONS ***

Diagnosis of Acute Pancreatitis

(see inclusion criteria above)

No → Off pathway, consider alternative diagnoses

Yes

MILD / MODERATE

LABS: CBC, CMP, lipase, amylase, GGT magnesium, triglycerides, LDH, CRP
IMAGING: US abdomen (if not already obtained)

Admit to inpatient + GI consult

Elevated WBC, BUN and Hct can be associated w/ a complicated course

SEVERE

** Unstable vital signs, respiratory distress, AKI, or signs of end organ dysfunction*

Consider PICU consult/admission

Early IV volume resuscitation has been associated with better outcomes

Studies have shown superiority of LR over NS, if available

FLUIDS

20 ml/kg LR or NS bolus

DEHYDRATED ?
Poor UOP, tachycardia, hypotension, delayed cap refill, poor skin turgor

Yes → Repeat 20 ml/kg LR or NS bolus → DEHYDRATED ? → Yes → Repeat 20 ml/kg LR or NS bolus → Consider PICU consult/admission

No → D5 NS or LR at 1.5x maintenance rate (max 150 ml/hr) → Wean IV fluids when euvolemic and tolerating enteral intake

PAIN MANGEMENT

MILD PAIN (score 0-3)
- Acetaminophen 15 mg/kg PO/IV q6 hrs (max 1,000 mg)
AND/OR Ibuprofen 10 mg/kg PO q6 hrs (max 800 mg)

MODERATE PAIN (score 4-10)
- Acetaminophen 15 mg/kg PO/IV q6 hrs (max 1,000 mg)
AND/OR Ketorolac 0.5 mg/kg IV q6 hrs (max 30 mg)
- Morphine 0.05 mg/kg IV q4 hrs PRN (max initial dose 5 mg)

All patient on opiates should be started on a bowel regimen

PAIN CONTROLLED ?

Yes → Wean pain medications after 24-48 hrs

No → - Acetaminophen 15 mg/kg IV q6 hrs (max 1,000 mg)
AND Ketorolac 0.5 mg/kg IV q6 hrs (max 30 mg)
- Morphine 0.1 mg/kg IV q4 hrs or consider a PCA

→ PAIN CONTROLLED ?

Yes → Wean pain medications after 24-48 hrs

No → Consider PCA and/or Pain consult

NUTRITION

CONTRAINDICATION TO ENTERAL FEEDS ?

Yes → NPO + IVF → > if 5 DAYS → NJ Feeds or TPN

No → Clear Liquid Diet → **TOLERATING DIET ?**

Yes → Regular Diet (when clinically stable/euvolemic) → **TOLERATING DIET ?**

Yes → Regular Diet Ad Lib

No → NJ/NG Feeds → **TOLERATING DIET ?**

Yes → Regular Diet Ad Lib

No → TPN

No → NJ/NG Feeds

* ABBREVIATIONS: D5 = 5% dextrose, LR = lactated ringers, NG = nasogastric, NJ = nasojejunal, NS = normal saline, PCA = patient-controlled analgesia, TPN = total parental nutrition.

ACUTE PANCREATITIS

ADDITIONAL CONSIDERATIONS:

FLUIDS:
- Fluid resuscitation and use of goal-directed therapy will improve outcomes; however, overly aggressive fluid resuscitation can result in complications. Monitor for signs of fluid overload or third-spacing frequent during the first 24-36 hours.
- Consider LR over NS if metabolic acidosis is present; LR may be superior to NS for initial resuscitation.
- Wean IV fluids based on clinical status and enteral intake.

LABS:
- Elevated WBC, BUN, and Hct can be associated with a complicated course of acute pancreatitis.
- Amylase or lipase trend does not correlate with pancreatitis outcome.

ANALGESIA:
- When using Acetaminophen or NSAIDs, at least one should be scheduled; the alternative may be scheduled or PRN.
- Use nonsteroidal anti-inflammatory drugs only if BUN and creatinine are normal.
- Alternative opiates may be substituted based on patient needs and institutional preferences.
- When using opioids, place patient on a bowel regimen.

NUTRITION:
- Unless contraindicated, patients should be started on a clear liquid diet at admission. Advance to a regular, age-appropriate diet once clinically stable and euvolemic. Delaying regular diet for 48-72 hours should be considered if there is any concern for necrotizing/severe pancreatitis
- Examples of contraindications to enteral feeding include, but are not limited to: hemodynamic instability, prior TPN-dependence, intestinal obstruction, and ileus.
- If not tolerating adequate PO diet within 48 to 72 hours, consider if pain and/or nausea are adequately controlled.
- In the rare cases of significant hypertriglyceridemia, consult Endocrinology for recommendations re: low-fat diet.

IMAGING:
- Obtain an US abdomen if not completed in the initial evaluation
- If persistent pain or intolerance of PO, consider imaging to evaluate for complications from pancreatitis (eg, pancreatic fluid collection/necrosis or pancreatic duct stricture/stones): (1) CT Abdomen with IV contrast, or (2) MRCP if biliary/pancreatic duct abnormalities are suspected.

Ochsner Children's Clinical Pathways Committee
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