Acute Pancreatitis – Nutrition Algorithm

Fluid Resuscitation:
- Hemodynamic compromise: 10-20 mL/kg bolus
- Hemodynamically stable: 1.5x maintenance IV fluids during the first 24 hours (may consider weaning after)
- Monitor urine output in the next 24-48 hours to avoid aggressive fluid resuscitation and prevent complications such as third-spacing

Intact gut function?
- Yes
  - Indicated:
    - Presence of bowel sounds
    - Passage of flatus
    - Presence of stools
    - Return of appetite
    - An X-ray of the GI tract may be indicated to assess the ability to utilize the GI tract (i.e., checking for signs of paralytic ileus)

Determined to have safe swallow?
- Yes
- No

Start Regular Diet
- Indicated:
  - Presence of bowel sounds
  - Passage of flatus
  - Presence of stools
  - Return of appetite
  - An X-ray of the GI tract may be indicated to assess the ability to utilize the GI tract (i.e., checking for signs of paralytic ileus)

Meeting >70% estimated energy and fluid needs via PO intake with no evidence of emesis or nausea within 2-3 days?
- Yes
  - Continue Regular Diet
- No

Parenteral Nutrition (PN)
- Indicated:
  - If anticipate long-term need of >5-7 days for parenteral nutrition, may start PN <24hr after admission.
  - Initiate PN if EN not possible for a prolonged period of >3 days.

Indications for PN include:
- Ileus
- Peritonitis
- Bowel ischemia
- Abdominal compartment syndrome
- Severe GI bleed
- Intractable vomiting and/or diarrhea
- Inoperable mechanical obstruction, etc.

Return of GI function?
- Yes
- No

Enteral Nutrition (EN)
- Indicated:
  - Presence of bowel sounds
  - Passage of flatus
  - Presence of stools
  - Return of appetite
- Indications for NG tube placement include:
  - Impaired swallowing ability
  - Poor PO intake
  - Poor growth
- Indications for NJ tube placement include:
  - Patient not tolerating NG tube feeds due to aspiration risk
  - Gastric motility issues
  - Gastric obstruction
  - Polymeric formula is preferred

Meeting >70% estimated energy and fluid needs via enteral nutrition for 2-3 days?
- Yes
  - Consider oral feeding
- No

Combination of EN + PN
- If unable to utilize gut, return to PN

Approved Evidence Based Medicine Committee
11/18/2020

Reassess the appropriateness of Care Guidelines as condition changes and 24 hrs after admission. This guideline is a tool to aid clinical decision making. It is not a standard of care. The physician should deviate from the guideline when clinical judgment so indicates.

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References


Lou J, Zhao H, Zhao H, et al. Early nasogastric versus nasojejunal tube feeding in paediatric acute pancreatitis: a randomized controlled trial. Hong kong journal of pediatrics. 2018;23(1)116 (Level I)


