

Neonatal Necrotizing Enterocolitis (NEC)/ Spontaneous Intestinal Perforation (SIP) Care Guideline

Inclusion Criteria:

- Primary abdominal process
- Abdominal distension, bloody stool or significant feeding intolerance

Exclusion Criteria:

- Congenital GI anomalies

Assessment

- Vital signs
- Physical exam – especially abdominal exam and hemodynamic perfusion/status
- Feeding history

Interventions

- Hold enteral feedings
- Decompression
- Intravenous hydration
- Analgesia – (fentanyl or morphine) as needed.
- Labs: CBC, CRP, blood culture. Consider BMP, PT/fibrinogen, blood gas
- Radiological evaluation: complete abdominal series or KUB +/- decubitus or cross-table lateral views.

Antibiotics/Antifungals (refer to order sets for dosing)

- Piperacillin/tazobactam
- +/- Vancomycin - for 48 hrs then re-evaluate
- If perforation suspected, add fluconazole
- Consider addition of gentamicin if hemodynamically unstable or suspected intestinal obstruction.
- Consider meropenem if positive blood culture & unable to perform lumbar puncture, or highly suspect meningitis.

Further Recommendations

- Monitor fluid and electrolyte status for possible third-spacing
- Repeat radiographic studies and lab tests as needed
- Surgical consult for suspected perforation or if patient unresponsive to medical management
- Consult ID if history of prolonged antibiotic exposure or abscess is present

Considerations

- Risk factors for NEC include prematurity, <1500 grams birth weight, receiving enteral feedings, ischemia related conditions
- Initiate TPN if plan for ongoing enteral feed restriction.
- Consider empiric antifungal therapy for worsening clinical status (refer to Neonatal Fungal Sepsis Guideline)
- Duration of antibiotics should be 10-14 days based on clinical status

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.

References

Neonatal Necrotizing Enterocolitis Care Guideline

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4-23-09

Reviewed by EBM Committee 9-21-16