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Gastroschisis

Arkansas Children's
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Disclaimer: This clinical pathway is provided as a general guideline for use by Licensed Independent Provider's (LIP) in planning care and treatment of patients. It is not intended to be and does not establish a standard of care. Each patient's care is individualized according to specific needs.

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Routine intubation is not recommended

Gastroschisis Delivery Room Management

Intestinal Atresia Pathway

Pre-Procedure Prophylaxis Pathway

- Team huddle with discussion of plan of care and clearly defined team member roles
- Advance preparation of supplies including:
  - Equipment for intubation
  - 8 and 10 fr replogle (use largest appropriate replogle size for patient)
  - Sterile bowel bag
  - Warm normal saline
- Cautious/judicious use of prolonged CPAP or NIMV
- Establish safe airway. Suction as needed with careful attention related to risk of bile aspiration
- Monitor leads can be placed on patient's upper chest and arms
- Place replogle to low intermittent suction (LIS)
- Place PIV **(Central access (PICC) will be obtained at ACH)**
  - Consider NS bolus 10 ml/kg
  - Total fluids at least 100 ml/kg/day
- Supplemental oxygen may be needed if the bowel appears dusky
- Asses temperature. The risk of hypothermia related to surface area of exposed bowel
- Assess perfusion and continue to closely monitor

Gastric Decompression
- Insert a replogle tube on low suction (40-60 mm Hg)
- 8 fr- preterm infant or LBW infant less than 2500 g
- 10 fr- full term infant

Care of the Exposed Bowel
Long umbilical cord (10 cm) requested

- Assess color (perfusion), shape (kinks), and size (dilatation) of bowel
  - Utilize sterile gloves when manipulating bowel
  - Place patient in side-lying position (right side) to increase venous return and prevent vascular compromise. Avoid placing the infant prone.
- Prepare bowel bag with approximately 1 oz of warm sterile normal saline to moisten the inside of the bag
- Put baby from the nipple line down into the bag.
  - Do not cut holes in the bag.
  - Do not use saline soaked gauze.

Upon NICU Arrival

IV Fluids
- Total fluids at least 100ml/kg/day
- Consider NS bolus 10 ml/kg

Labs
- Blood gas
- Hematocrit
- BMP
- Newborn screen
- Blood culture, if clinically indicated

Imaging
- 2 view abdominal x-ray

Consult
- Surgery consult

- PICC placement upon arrival
- Establish a safe airway but routine intubation is not recommended
- Establish IV access
- Avoid umbilical lines and upper extremity IV access is preferable due to placement of bowel bag

Infants with Gastroschisis are at high risk for
- Late onset sepsis (PATHWAY LINK)
- Skin and soft tissue infections (cellulitis, abscess, post-wound debridement etc.)
- Central line associated bacterial infections
- UTI and pneumonia (mainly for those who remain intubated)
- Small Intestinal Bacterial Overgrowth (SIBO)

Intestinal Atresia

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Gastroschisis Pathway

Pre-Procedure Prophylaxis Pathway

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Routine intubation is not recommended

Small Bowel Atresia Delivery Room Management

- Cautious/judicious use of prolonged CPAP or NIMV
- Place replogle to low intermittent suction
- PIV if infant on minimal respiratory support
- Consider umbilical lines for:
  - Intubated infants
  - Inability to obtain PIV
  - Central access is needed for other reasons
- PICC will be placed at ACH

IV Fluids

- Total fluids at least 80 ml/kg/day
- Consider NS bolus 10 ml/kg

Labs

- Blood gas
- Hematocrit
- BMP
- Newborn screen
- Blood culture, if clinically indicated

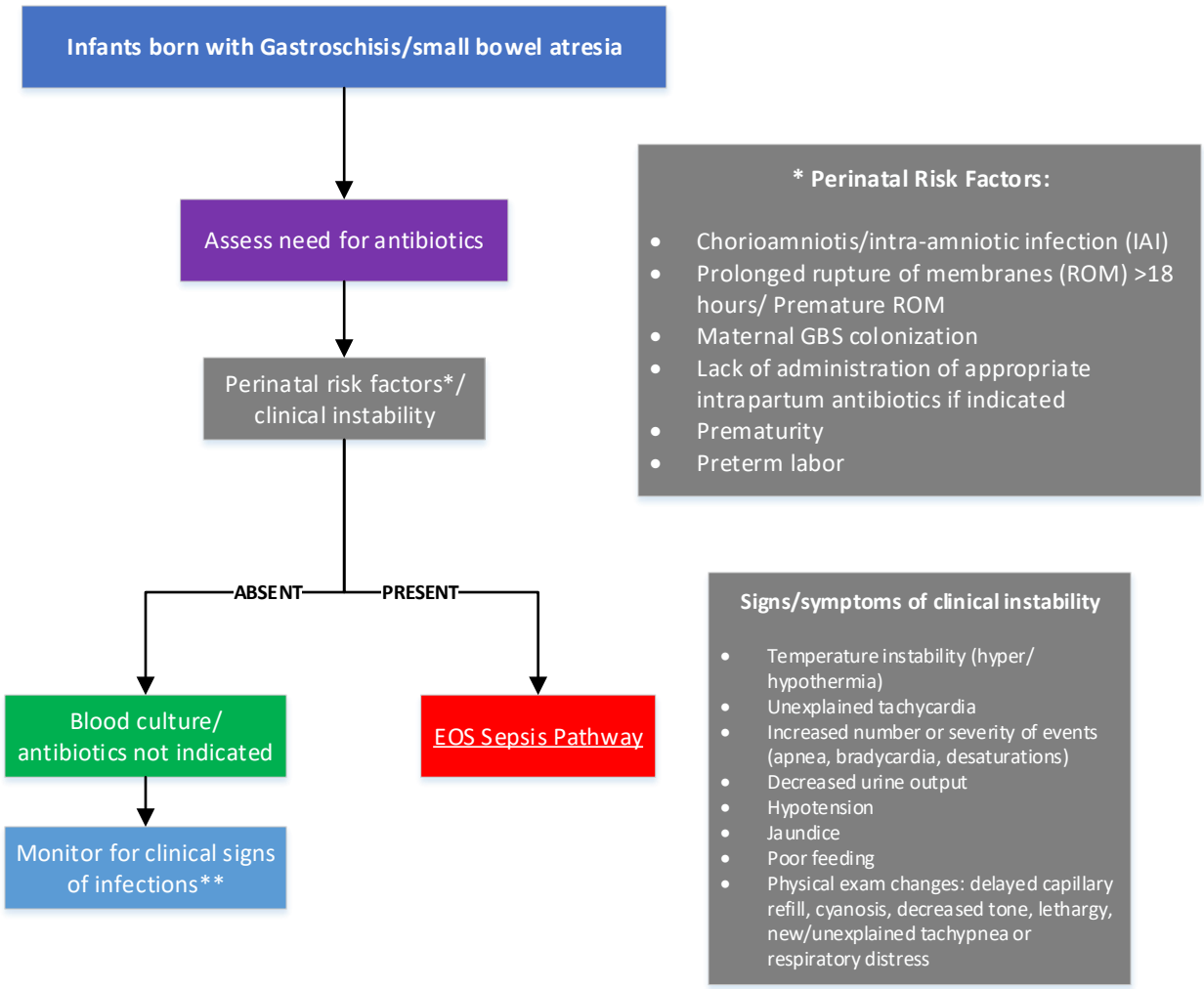
Imaging

- 2 view abdominal x-ray

Consult

- Surgery consult

Pre-Procedure Antibiotics



Surgical Prophylaxis:

- Cefazolin 25 mg/kg every 12 hours (or every 8 hours for infants > 7 days)
  - Cefazolin to be given within 60 minutes of surgical start time

Peri-operative:

Antibiotics not recommended in the absence of culture positive sepsis or clinical instability in small bowel atresia or uncomplicated gastroschisis (perforation, vascular compromise) for:

- Staged closure with silo
- Suture-less closure at bedside

Post-operative:

Recommend discontinuation of antibiotic therapy 24 hours after abdominal closure/surgery in the absence of culture-positive sepsis or clinical instability.

Metrics

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References

Children's Hospital of Orange County (CHOC). 2018. Gastroschisis Clinical Guideline. https://www.choc.org/wp/wp-content/uploads/2018/06/GastroschisisClinicalGuideline.pdf