FEEDING TOLERANCE ASSESSMENT

Little info exists regarding risks & benefits of routine residual checks in the neonatal population. Although its performed, its lack of reliability as a measure of gastric contents makes its clinical usefulness questionable. There is also insufficient evidence that routine girth or residuals assists in the dx of feeding intolerance or NEC

Why should I avoid routine residual checks

- Unreliable & not evidenced based
- May result in harm: increased NPO days and CL days & extrauterine growth failure
- Residual volume is influenced by caliber of tube, body position, viscosity of feeding gastric motility making measurement unreliable
- Unclear that residuals is linked to feeding intolerance or NEC

What happens when I check residuals

- Irritation/injury of stomach mucosa
- Removal of valuable stomach enzymes
- Delays in feeding advancement
- Increased CL days
- Extrauterine growth failure & Neurodevelopmental delay

When should I consider gastric residual volume

- Only when other clinical symptoms are present

What about checking for gastric tube placement

- Record infant's feeding tube insertion length bedside for easy verification prior to feeding
- Only pull back until you see contents in the gastric tube
- When on CPAP & assessing for air, only pull back until you see milk entering syringe

What are the signs of feeding intolerance

- Abdominal distension
- Visual change in abdomen
- Emesis
- Bowel Loops
- Increased A/B/D's

What are significant indicators of NEC

- Abdominal distension
- Abdominal discolorations (dusky, reddish)
- Abdominal pain when touched
- Blood in stool
- Signs of infections (A/B/D's, lethargy, hypotension, temperature instability)

When do I notify the MD?

- Bloody stools
- Abdominal distension
- Bowel loops, erythema, discoloration or tenderness
- Cardiorespiratory instability

Osmolality – AAP recommends enteral no> 450 mOsm/kg/water

- Addition of commercial fortifiers/protein increase osmolality to the recommended AAP threshold
- High Osmolality feeding/medications have potential for delayed gastric emptying/increased stooling & intolerance
- Each additional medication added to feedings further increases osmolality
- Consider how medications are scheduled to aid tolerance