GUIDELINE

Bilious Vomiting/Aspirates and Feed Intolerance

Scope (Staff):	Nursing and Medical Staff
Scope (Area):	NICU KEMH, NICU PCH, NETS WA

Child Safe Organisation Statement of Commitment

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

This document should be read in conjunction with this disclaimer

Aim

The aim of this guideline is to outline the management of neonates presenting with feed intolerance

Risk

Feed intolerance can be indication of underlying or developing gastric problems. Delayed identification and management may lead to adverse outcomes.

Background

The decision whether the feeds should be continued, reduced, or stopped will be at the discretion of the attending neonatologist. Feeds are usually stopped if there are bile-stained or large gastric residuals and vomiting and/or abdominal distension and/or blood in the stools. Investigations are carried out and an assessment is made after 12 to 24 hours. Feeds can generally be restarted when the infant has stabilised and has had a 12-24 hour absence of any significant clinical signs of feed intolerance.

Signs of Feed Intolerance

Gastric Residuals

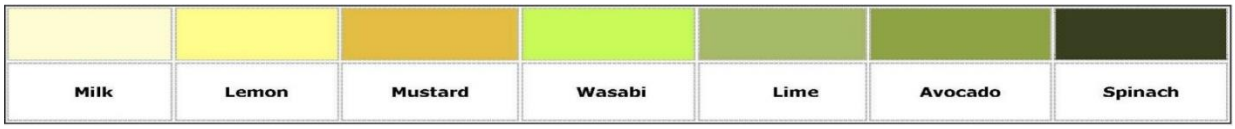
A large gastric residual is defined as a gastric residual > 30% of the total feeds given over the previous four hours or greater than a 1-hour volume if on Continuous Milk Feeds (CMF). Following such a residual, the aspirate is returned to the stomach and the next feed omitted. If the gastric residual prior to the next feed is normal, feeds are resumed. If the gastric residual remains large, a medical review of the feeding

schedule is required. Refer to Enteral Feeding: Bolus Tube Feeds Continuous Milk Feed, Bottle Feed.

Bilious Aspirates and Bilious Vomiting

- **Bilious Vomiting**

Bilious vomiting is **NEVER** normal and must be promptly investigated to exclude Malrotation/Volvulus and the potential devastating sequelae. Bile is green so it is important to confirm the colour of the vomit/aspirates.



The gold standard treatment for investigating a suspected malrotation is an upper GI contrast study and review by a surgical team. Normal AXR, abdominal examination, lactate levels, blood pressure, urine output and blood gases do not rule out early intestinal gangrene secondary to malrotation/volvulus. Therefore, these transfers are generally considered a **time-critical retrieval to a site that performs imaging and surgery**.

- **Bilious Aspirates**

Bile aspirates can be a sign of ileus or intestinal obstruction and needs to be discussed and reviewed with either the consultant or senior registrar to exclude Malrotation/Volvulus.

  - ***Infants <32 weeks corrected gestational age***

  With isolated bile aspirates, continue enteral feeds if the aspirates are clearing or not worsening. If aspirates are “persistent” and/or “worsening” over 12 to 24 hours, **STOP** feeds for 12 to 24 hours The decision whether the feeds could be **continued but not upgraded** will be at the discretion of the attending neonatologist.

  - ***Infants >32 weeks corrected gestational age***

  With bilious aspirates, medical review should be sought and discussed with senior medical staff. Consideration should be given to performing an upper GI contrast study to rule out malrotation. This is especially important in infants with other concerning signs such as abdominal distension, clinically unstable (abnormal observations, abnormal gas), and/or those who have previously been tolerating feeds well. Other causes of bilious aspirate such as NEC and sepsis should also be considered.

Vomiting

Vomiting (without bile) may be the result of an over distended stomach, poorly positioned feeding tube, Gastro Oesophageal Reflux, overstimulation in a LBW infant or may be more sinister - infection, obstruction or a metabolic or neurological disorder.

Abdominal Distension

Distension with or without visible loops can be due to poor gastric motility, ileus, constipation or 'gas'. If the abdomen remains soft / non tender it may resolve with prone positioning or glycerine.

A finding of a tense or tender abdomen with or without visible loops of bowel is abnormal and requires investigation for obstruction, infection or Necrotising Enterocolitis

Related CAHS internal policies, procedures and guidelines
Neonatology Clinical Guidelines • Enteral Feeding: Bolus Tube Feeds Continuous Milk Feed, Bottle Feed. • Gastro Oesophageal Reflux • Necrotising Enterocolitis

This document can be made available in alternative formats on request.

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