Gastro-Oesophageal Reflux

Whānau/Family Information – Neonatal Services

Key messages

- Gastro-oesophageal reflux (GOR) is very common in preterm infants and rarely serious (cause harm).
- Most infants with gastro-oesophageal reflux do not require drug therapy.
- Most infants with recurrent apnoea and bradycardia do not have GOR.
- Investigation and management of GOR in the Neonatal Unit should be reserved for those infants in whom the reflux is considered to be symptomatic Gastro-Oesophageal Reflux Disease (GORD).

GOR is the spontaneous effortless regurgitation of gastric contents into the oesophagus that may or may not result in vomiting. GOR can be suspected in a pēpi/baby who is regularly spilling feeds, is seen to have milk in his/her mouth or is swallowing outside of feed times.

GOR is commonly seen in around half of infants in the first two months of life. Reflux is more common in premature infants than term. It is a self-limiting condition and normally resolves by 12 months with or without treatment.

Reflux becomes symptomatic when the acid in the stomach contents irritates the oesophageal lining. GORD is considered significant if it makes pēpi very unsettled and appears in pain or discomfort during or following a feed. They may also have increased unexplained apnoeic events and occasionally milk aspirates into the airways. Investigation and management of GOR should be reserved for those infants in whom the reflux is considered to be symptomatic GORD.

What causes reflux?

There are many causes of reflux. Some of these include:

- Underdevelopment of the muscles (sphincter) between the stomach and oesophagus.
- Small size of the stomach and slow stomach emptying.
- Pēpi spending more time lying down.
- Milk diets are easier to reflux than solid food.
- In some pēpi it may be aggravated by the medications a pēpi needs, eg. caffeine.
- Can be associated with milk protein allergy.

What is the treatment?

Treatment of pēpi with reflux is a stepwise process that starts with a trial of different nursing techniques.

- To reduce the size of the feeds by changing to smaller more frequent feeds, eg. three-hourly feeds changed to two-hourly until the symptoms, usually spilling, has settled down.
- Burping well after feeds, or aspirating the nasogastric tube.
- Non-nutritive sucking (NNS) during the tube feed improves gastric emptying and decreases the number of reflux episodes.
- Sometimes it is necessary to nurse pēpi prone. This is only an option if pēpi is supervised and monitored in the unit and should not to be done at home.
- There is no evidence that propping beds is in anyway helpful. Safe sleep recommends never propping the cot.
- An antacid Gaviscon may be prescribed and given with the feed. This is not absorbed but neutralises the acid that reaches the oesophagus.
- In more severe cases medications to reduce stomach acid are used (Omeprazole most commonly).

Omeprazole (Losec) works by blocking the production of stomach acid, and has less effect on the reflux itself. Use of Omeprazole is limited to severe GORD as it has been found to be associated with increased infections in the pēpi and then possible sepsis due to a reduction in acid which can kill bacteria in the stomach.

What if symptoms persist?

In the most severe cases a decision may be made to do a surgical correction called a Nissen fundoplication. It is an operation where the neck of the stomach is tied in such a way that food can enter the stomach but is prevented from backtracking up the oesophagus. This is only likely to be a consideration in the most severe cases where pēpi safety is compromised by frequent apnoea, aspiration of milk into the airway or failure to thrive.

Sids and Kids – Reflux: Sleeping Position for Babies with Gastro Oesophageal Reflux

KidsHealth - Reflux