GORD in infants

Much is "physiological" and will resolve without treatment. More severe symptoms include poor weight gain, excessive crying, distressed behaviour, oesophagitis and occasional breathing difficulties.

Risk factors for more troublesome GORD

- Prematurity
- Neurodevelopmental delay eg. cerebral palsy and other syndromes
- Conditions result in slow gastric emptying
- Cows milk hypersensitivity

Diagnosis

Gold standard is intraluminal oesophageal pH monitoring and endoscopy to confirm oesophagitis but neither is usually required. Generally diagnosed with a story of regurgitation and vomiting after feeds and possible associated colic - crying, drawing legs up, pain after feeding.

General advice:

- Avoid overfeeding
- Prevalence similar in bottle and breast fed
- No evidence that positioning infants [with head uppermost with lying supine] helps
- Thickening feeds may be moderately effective in reducing reflux episodes in healthy infants [pre-thickened formulas including Enfamil AR, SMA staydown use for upto 6 months but not in conjunction with other antacid products]
 - Feed thickeners such as Carobel, Thick&Easy, Vitaquick can be used to thicken other milk feeds but have to be used with a bottle with large teat and may result in excessive calorie intake
- If suspect cow's milk allergy swap to hydrolysed milk formula for 4 weeks[consider exclusion of dairy products in the mother's diet with breast fed babies]. Symptoms should improve with 2 weeks

Drug treatments

Alginates e.g. gaviscon infant

- Contraindicated in imparied renal function, excessive fluid loss and obstruction
- Do not use with other thickening agents
- Reduced number of vomiting episodes after 2 weeks but no reduction in severity of vomits
- One dose with each milk feed (or water in breast fed infants) up to 6 times daily

If the above don't control symptoms refer to paediatrician for H2 antagonist e.g. ranitidine / PPI. Can be helpful but may be associated with increased rates of gastroenteritis and in very low birthweight infants, candiaemia and necrotising entercolitis.

Cow's milk allergy

Affects 2-3% of children and 0.5% of purely breast fed infants[may cause symptoms as mother's is ingesting cow's milk]

Two types of cow's milk allergy:

- IgE mediate Type 1 hypersensitivity
 - tends to present early with urticaria, wheeze and vomiting. Sometimes anaphlaxis
- Non-IgE mediate Type IV hypersensitivity
 - more delayed onset, diverse presentation commonly affecting the skin and GI tract including diarrhoea, colic, reflux

How can it present?

Consider when:

- symptoms occur with 1 week of first ingestion of cow's milk produce
- several body systems affected: espec skin, GI tract and RS
- family history of atopy
- lactose intolerance has been excluded [this will cause explosive watery diarrhoea after ingestion of cow's milk
- positive skin prick, IgE testing or eosinophilia on blood count

How to diagnose?

There is no specific test and diagnosis relies on:

- Complete dietary exclusion of cow's milk protein and then supervised challenge to confirm diagnosis
- In exclusively breast fed infants cow's milk protein should be completely excluded from the mother's diet
- Infants with severe reactions should be challenged in a hospital setting with resuscitation facilities
- IgE RAST testing confirm Type 1 hypersensitivity but a negative test cannot exclude non-IgE mediated allergy However colic, atopic dermatitis, GORD can all occur in infants without being caused by cow's milk allergy.

How to manage?

Complete exclusion of cow's milk from the infant or mother's diet

Replacement with extensively hydrolyzed formulas e.g. Nutramigen, Neocate [do not use mammalian, soya or rice milk formulas because of high antigenic cross over].

Refer to dietitian [to ensure they have adequate calcium and vitamin D intake].

If anaphylactic type reaction will need epipen.

When can they be rechallenged?

Cow's milk can be reintroduced for the vast majority of children by the age of 3 [87% tolerate by age 3, 75% by age 2] Allergy is more likely to persist in those with IgE mediate disease