

Gastro-oesophageal Reflux / Gastro-oesophageal reflux disease in Infants



What is Gastro-oesophageal reflux and how common is it?

Gastro-oesophageal reflux (GOR) is the passage of the gastric contents into the oesophagus with or without regurgitation or vomiting. It is a normal physiological process that occurs several times a day in healthy infants affecting up to 70% often with few symptoms and no complications. Approximately 50% of infants regurgitate at least once a day between the ages of 0-3 months but this will decrease to 5% in most infants by the age of 10-12 months. In 95% of infants it resolves without intervention by 12-24 months because of the lengthening of the oesophagus and development of the gastro-oesophageal sphincter. Silent reflux refers to refluxed material that flows back into the oesophagus but isn't forced out of the mouth.

More severe forms of this problem are found when an infant with regurgitation does not respond to simple treatment and develops gastro-oesophageal reflux disease (GORD). GORD should be suspected in children with symptoms such as frequent regurgitation or vomiting (which may occur up to two hours after feeding), excessive crying, irritability and / or back arching during or after feeding and feeding refusal (despite being willing to suck on a dummy).

Both GOR and GORD can be very distressing and painful for infants and it can be equally distressing for parents to hear their baby cry for hours on end and have difficulty with feeding.

What should I do initially if my infant has GOR or GORD?

- **Positioning**

Some infants with reflux are helped enormously by being positioned upright for feeds and immediately afterwards for at least 30minutes, and for some this may be the only treatment they need. Other advice such as avoiding excessive movements after feeding, avoiding tight fitting clothing especially around the waist and the use of a carrier or sling after feeding may all help.

How can a dietitian help me or my child if they have GOR / GORD?

Dietitians will be able to provide suitable and tailored individualised advice for your infant which may alleviate some of their reflux symptoms. Following a detailed dietary assessment of your child / infant (including assessment of growth, any relevant biochemical, clinical and medical details, feeding and dietary history and social history) the dietitian may provide advice on one of more of the following treatment strategies:

- **Feeding practices & volume**

It is important that the infant is not overfed and he / she should be offered age appropriate volumes of milk. The dietitian will be able to assess this and provide appropriate advice for your child looking in detail at their feeding and growth history.

- **Thickened feeds**

Thickening feeds can reduce regurgitation and vomiting and is often the first line of treatment however there is inconclusive evidence to show whether it reduces reflux and therefore acid exposure in the oesophagus.

Feed thickeners are available which can be added to breast milk and / or infant formula and these are usually available to purchase in your local pharmacy

There are various pre-thickened infant formulas available on the market. Some formula thicken on contact with the acid pH of the stomach and others thicken on mixing. Anti-reflux formula can only be bought from a pharmacist but they are not actually prescription items. They are slightly more expensive than routine formula and cost may vary from pharmacist to pharmacist. Generally anti-reflux formula should not be used with an antacid medication e.g. Ranitidine (Zantac) or Losec (Omeprazole) as some need acid in the stomach to thicken. They should not be used either with other thickening agents such as Gaviscon or Carobel.

A dietitian will be able to provide advice on whether thickening your infant's current formula or breast milk is suitable and / or appropriate or they may also suggest a trial of one of the many pre-thickened anti-reflux formulas that are available.

- **Cow's milk protein allergy**

Symptoms of GORD, particularly in infants, may be indistinguishable from those of food allergy. A number of studies have shown that 30-40% of infants with GOR resistant to treatment have cow's milk allergy, with symptoms significantly improving on a cow's milk protein free diet. In breastfed infant's mothers should be advised by the dietitian on a trial of a maternal cow's milk protein free diet and trial of an extensively hydrolysed or amino acid formula is recommended for formula fed infants. There are many hypoallergenic formulas available on the market and your dietitian will be able to provide specific advice on the most suitable formula based on the individual symptoms of your child and following the dietary assessment.

Are there any medical treatments available for my child?

Speak to your GP or Paediatrician for detailed information and advice on the medical treatments that may be suitable for your child. Detailed below is an overview of some options which your doctor may discuss with you and your family.

Gaviscon acts as a thickening agent and like other feed thickeners has been shown to reduce the amount of regurgitation or vomiting but not reflux.

The main drugs used to treat GORD are H2 receptor antagonists like Ranitidine (Zantac) and proton pump inhibitors like Omeprazole (Losec). Both of these reduce gastric acid secretion and therefore help the oesophagus to heal but they do not cure reflux or stop the child from vomiting. Some children respond well to them, and may do so almost immediately; however, some children may not show improvement for several weeks, if at all.

It can take time to find the right combination and dosage of medication that is effective for your child. If any inflammation is present, improvement can take even longer.

Surgery (fundoplication) is used as a last resort in extreme unresponsive cases.



Olivia Walsh RD MINDI

B.Sc (Hum Nut), Dip (Diet)

Specialist Paediatric Dietitian

Clinical Nutrition Consultancy