Reflux & Regurgitation in infants

What is gastro-oesophageal reflux (GOR) and regurgitation?

The terms reflux and regurgitation are often used interchangeably.

Uncomplicated regurgitation, or simple gastro-oesophageal reflux (GOR), in otherwise healthy infants is not a disease. It consists of milk flow from mouth during or after feeding. Common causes include overfeeding, air swallowed during feeding, crying or coughing; physical examination is normal and weight gain is adequate.[1]

Regurgitation of refluxed material occurs in 67% of infants by age 4 months and decreases to 0–5% by 12 months of age.[2] Although often distressing for parents, for the large majority of infants, regurgitation does not cause problems with growth and spontaneously decreases to 0–5% by 12 months of age.[3] GOR is especially common in infants due to: a short esophagus, the immaturity of the esophagus and stomach, an obtuse 'Angle of His', and a diet consisting primarily of liquids.[4] Resolution tends to occur when the infant is able to hold itself in an upright position, the oesophagus lengthens and the sphincter between the stomach and oesophagus advances in maturation. Whilst messy for parents, for most infants regurgitation does not cause distress.

Regurgitation is also a symptom of the more problematic and complicated gastro-oesophageal reflux disease (GORD). This is usually investigated and diagnosed when treatments for simple cases of GOR fail or when there is failure to thrive or other health problems. Clinical manifestations of GORD in children include vomiting, poor weight gain, dysphagia, abdominal or substernal pain, esophagitis and respiratory disorders. Because subjective symptom description lacks reliability in infants, many of GORD symptoms in infants and children are nonspecific.[5-6]

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Why does gastro-oesophageal regurgitation (GOR) or regurgitation occur in infants?

During infancy, systems within the body are growing and maturing, including the digestive system. The shorter length of oesophagus, the immaturity of the sphincter between the stomach and the oesophagus and the extended periods of time infants are horizontal all contribute to simple gastro-oesophageal reflux (GOR) and episodes of regurgitation in infants.

What are the signs and symptoms of gastro-oesophageal reflux (GOR) and regurgitation?

Regurgitation of feeds is the most common symptom of simple gastro-oesophageal reflux (GOR) but it is also a symptom of many other more serious conditions, including the more problematic and complicated gastro-oesophageal reflux disease (GORD) and as such should always be thoroughly investigated.

Whilst recurrent regurgitation or apparent vomiting is the most common symptom associated with simple GOR, other symptoms may include:

Excessive crying
Irritability (especially when lying flat)
Back arching
Feed refusal
Haematemesis
Failure to thrive
Recurrent aspiration which may be associated with respiratory illness

How is gastro-oesophageal reflux (GOR) diagnosed?

Symptoms and signs associated with GOR are non-specific. Regurgitation, irritability, and vomiting are common both in infants with physiologic GOR or GORD[7] and in infant with other diseases such as food allergy,[8] persistent crying[9] and so on.

Simple gastro-oesophageal reflux (GOR) is usually diagnosed through records of the infant's health and observation. It is important to exclude other causes of regurgitation/vomiting in infants (such as pyloric stenosis, infections, central nervous system abnormality, chronic renal disease, allergic gastroenteropathies and achalasia).[3]

Management of gastro-oesophageal reflux (GOR) and regurgitation in infants.

In cases of simple gastro-oesophageal reflux (GOR) where regurgitation is the primary symptom:

- Continue to breast feed.
- Parental reassurance as to the frequency of simple GOR in infants and should be offered as the principle first line treatment.
- Postural measures, for example trying to keep infants upright for 30 minutes after feeding and where possible changing nappies before feeding.
- Avoid over feeding.
- Burping the infant after feeding. Ideally the head should rest on the parent's shoulder and the legs should be kept extended. Burping infants whilst they are in a seated position should be avoided.
- Use of thickened feeds may be helpful for some infants.

Management of gastro-oesophageal reflux disease (GORD) in infants.

The cause of more complicated cases of gastro-oesphageal reflux disease (GORD) is varied and thus management of GORD will depend on the underlying cause of the disease.

Once the underlying cause of GORD is identified the appropriate treatment should be prescribed and managed by a Healthcare Professional.

Where to get help and support for parents?

Web: www.reflux.org.au/risasite
Mail: PO Box 1598, Fortitude Valley QLD 4006.
Phone: (07) 3229 1090 [Message Bank].

Gastric Reflux Support Network New Zealand
www.cryingoverspiltmilk.co.nz

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For enquiries please contact the Danone Nutricia Advisory Team

AUSTRALIA 1800 060 057
www.danonenutriciaprofessional.com.au

NEW ZEALAND 0800 688 742
www.danonenutricia.co.nz

A resource for Healthcare Professionals

BREAST MILK IS BEST FOR BABIES: Professional advice should be followed before using an infant formula. Introducing partial bottle feeding could negatively affect breast feeding. Good maternal nutrition is important for breast feeding and reversing a decision not to breast feed may be difficult. Infant formula should be used as directed. Proper use of an infant formula is important to the health of the infant. Social and financial implications should be considered when selecting a method of feeding.

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