

Gastro-oesophageal reflux in babies

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What is gastro-oesophageal reflux?

Reflux in itself is normal in babies, and is especially common in premature babies. Reflux is sometimes known as 'possetting' or 'regurgitation' because you can usually see the milk coming back up after a baby has been fed. In a small number of cases, the reflux is long term and the medical name for this is gastro-oesophageal reflux.

When a baby has gastro-oesophageal reflux, milk travels down the food pipe (oesophagus) as normal into the stomach where it mixes with acid (which helps to digest food). Unlike babies unaffected by the disease, some of the milk and acid travels back up the food pipe instead of passing through to the small and large intestine, causing irritation and pain. This is known as gastro-oesophageal reflux disease and tends to start in the baby's first 8 weeks.

What causes gastro-oesophageal reflux?

Gastro-oesophageal reflux is very common in the first few weeks and sometimes even months of life and affects as many as nearly half of all babies aged under 1 year old. The disease is caused as a result of an under developed and therefore weak sphincter (ring of muscle) at the bottom of the food pipe. In premature babies, the sphincter is even less developed and doesn't close properly meaning that gastro-oesophageal reflux is much more likely to occur. Consequently, the contents of the stomach can travel back up the food pipe more easily. Many babies with gastro-oesophageal reflux improve as they get older and their body strengthens, especially when they start to eat more solid foods.

What are the signs and symptoms?

Most of the signs and symptoms of gastro-oesophageal reflux are the same for full-term as they are for premature babies but this can vary depending on the severity of the disease and can include:

- Regurgitating up milk during or after feeds – some babies might bring up milk six or more times a day
- Feeding difficulties – such as refusing feeds, gagging or choking
- Poor weight gain

- Persistent hiccups or coughing
- Excessive crying during or after feeding
- Frequent chest infections (due to breathing the milky acidic mixture into the windpipe and the lungs)
- Frequent ear infections
- Scarring and narrowing of the food pipe (oesophagus)

In **premature babies**, signs and symptoms of gastro-oesophageal reflux may also include:

- Apnoea (a pause in breathing for longer than 10 to 15 seconds)
- Bradycardia (a significant decrease in heart rate)
- Desaturation (a significant decrease in the amount of oxygen circulating in a babies blood)

The nurse caring for your premature baby will be able to explain your baby's symptoms in more detail with you.

Seeing a healthcare professional

If you are concerned about your baby's regurgitation or vomiting a healthcare professional will want to know about your baby's symptoms and examine your baby. This will help the healthcare professional decide whether and test or treatments are needed.

If you are at home and you notice any of the following it is important that you take your baby to see a health professional:

- If the regurgitation becomes forceful, also known as 'projectile vomiting' (when vomit is expelled with such force that it lands some distance away)
- If your baby brings up milk that is green or yellowish green (it could be bile, a bitter fluid that helps digestion), or it looks as though there may be blood in it
- If your baby has any new problems or if things get worse

How is it diagnosed?

In many cases, your doctor will be able to diagnose gastro-oesophageal reflux after looking at your baby's history and examining them, reassuringly most babies recover (9 out of 10) by the time they are 1 years old.

How is it treated?

In most cases, small adjustments to your babies feeding pattern or positioning can be enough to improve their symptoms. Some of the following ways may be used:

- Decreasing the amount your baby is fed but feeding them more often (little and often)

- 'Winding' your baby more regularly
- Feeding your baby in a more upright position
- Keeping your baby in an upright position for a period of time following a feed
- Tilting your baby's cot so that the head end is slightly elevated (do not use pillows to raise your baby's head as this increases the risk of cot death)

If your baby's symptoms still persist a health professional may suggest different treatments.

Breast-fed babies

For breast-fed babies who often regurgitate their milk, are very distressed and seem in obvious pain, a healthcare professional may recommend some of the above techniques. Additionally, they should offer you a breastfeeding assessment and further support if there are any problems.

Bottle-fed babies

For bottle-fed babies who often regurgitate their milk, are very distressed and seem in obvious pain the healthcare professional may suggest some of the above techniques. If these do not work, then a health care professional may recommend changing to a thickened feed or adding a thickener for a trial period. There are different products that make milk thicker and your health care professional should be able to offer more advice.

Premature babies

Premature babies are likely to be cared for on the special care baby unit (SCU). If your baby is displaying symptoms of gastro-oesophageal reflux it is likely that the nurse or doctor caring for your baby will discuss and explain treatments in more detail with you.

As discussed, premature babies are more likely to have gastro-oesophageal reflux and may exhibit different signs and symptoms than full-term babies. Many of the treatments advised will be as above, however some may be more specific to premature infants, for example we may:

- Monitor your babies heart rate and oxygen levels so that we are able to see any changes
- Use an apnoea alarm to monitor your baby's breathing
- Ask you to do your baby's 'cares' such as nappy changes before a feed
- Semi-incline your baby's cot
- Change your baby's position during a feed to a more upright one
- Ask you to give your baby 'kangaroo care' or 'skin to skin' after a feed to keep your baby in a more upright position before placing them back in a semi-inclined cot

- Place your baby in the 'prone' position (on their tummy) after a feed to aid digestion (this should never be done in any other environment than SCU as this increases the risk of cot death, **babies should always be placed on their back to sleep**). Babies will be monitored closely by nurses when they are placed on their tummy in SCU.

What if the treatment doesn't work?

If the above suggestions do not lead to an improvement in your baby's symptoms, a doctor may consider starting your baby on medication. There are different medications available for the treatment of gastro-oesophageal reflux and your doctor will decide which from of medication is most appropriate for your baby's needs. These medications work in different ways which include:

- Reducing acid production in the stomach
- Speeding up the rate at which the stomach contents moves to the small intestine (duodenum)
- Forming a barrier on top of the stomach contents to reduce the risk of it travelling back up the food pipe

In the unlikely event that your baby's gastro-oesophageal reflux is not controlled by medications, then it is likely that more tests may be required to assess your baby's needs. Your doctor will explain these if they are required.

References

Bliss. (2017). Reflux. [Online] Available at: <http://www.bliss.org.uk/reflux> [Accessed 14th November 2017].

Hasall, E. (2014). Parents' guide to Gastro-Oesophageal Reflux (GOR) and Reflux Disease (GORD) in Infants. [Online] Available at: <http://www.livingwithreflux.org/advice-for-you/paediatric-leaflet-infants-under-1yr/gastro-oesophageal-reflux-gor-and-reflux-disease-gord-in-infants/> [Assessed on 9th November 2017].

Great Ormond Street Children's Hospital. (2014). Gastro-oesophageal reflux. [Online] Available at: <file:///C:/Users/StaddoCh/Downloads/Gastro%20oesophageal%20reflux.pdf> [Accessed 9th November 2017]

National Health Service. (2016). Reflux in babies. [Online] Available at: <https://www.nhs.uk/conditions/reflux-in-babies/> [Accessed 11th November 2017]

National Institute for Health and Care Excellence. (2015). Reflux, regurgitation and heartburn in babies, children and young people.

The Hillingdon Hospitals NHS Foundation Trust. (2014). Gastro-oesophageal reflux. [Online] Available at: https://www.thh.nhs.uk/documents/_Patients/PatientLeaflets/paediatrics/PI312_Gastro_oesophageal_reflux_Sept16.pdf [Accessed 11th November 2017]

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Northern Devon Healthcare NHS Trust
Raleigh Park, Barnstaple
Devon EX31 4JB
Tel. 01271 322577
www.northdevonhealth.nhs.uk

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