Reflux, regurgitation and heartburn in babies, children and young people

Information for the public
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About this information

NICE guidelines provide advice on the care and support that should be offered to people who use health and care services.

This information explains the advice about reflux, regurgitation and heartburn in children of all ages that is set out in NICE guideline NG1. NICE has also produced information for the public on indigestion, heartburn and reflux in adults.

Does this information apply to me?

Yes, if you are:

- a child or young person (up to age 18) with reflux, regurgitation or heartburn
- a parent, carer or family member of a baby, child or young person with reflux, regurgitation or heartburn.

This information has been written for children and young people, parents, carers and family members, to help them understand the care that should be offered.
What is meant by 'reflux, regurgitation and heartburn'?

Reflux is the medical term for what happens when some of the stomach contents come back out of the stomach and up the oesophagus (the tube from the mouth to the stomach).

Reflux is very common, and affects people of all ages. It tends to happen more often after meals, and the symptoms can sometimes be uncomfortable.

The stomach contains acid, which helps to digest food. When reflux happens, a small amount of the acidic stomach contents can come back up towards the throat. This can irritate the lining of the oesophagus, causing discomfort or pain.

If reflux causes discomfort or pain on a regular basis, or if it causes other problems, for example, poor growth in babies, healthcare professionals call it acid reflux, gastro-oesophageal reflux disease, or GORD for short.

Please also see the section sources of advice and support.

Babies

Reflux is normal in babies, and affects nearly half of all babies to some extent. It is often called 'posseting' or 'regurgitation' because you can usually see the milk coming back up after the baby's feed. The medical name for this is reflux. Babies may regurgitate a small amount of their feed, or they might be sick, vomiting some or all of their feed.

Babies with reflux may cry and be hard to comfort, they may arch their backs, they may fuss over feeds or refuse feeds, or they may regurgitate feeds effortlessly.

Children and young people

Children and young people can also have reflux, and they may say it feels like 'a bit of sick' has come up to their throat.

They may feel heartburn – a burning sensation because of the acid that has come up the oesophagus from the stomach. They may feel pain or discomfort in the chest behind the breastbone, and the feeling might move up towards the throat. Other symptoms include an unpleasant taste in the mouth and regurgitation or vomiting.
Your healthcare team

A range of professionals who specialise in different areas of treatment or support may be involved. These could include midwives, health visitors, nurses, GPs, pharmacists, specialist nurses, paediatricians or other specialists. All of these professionals will be trained and experienced in providing particular treatments or support.

Working with you

If you are a parent or carer, a member of your child's healthcare team should explain the symptoms and what they mean, and any tests or treatments that may be offered, so that you can decide together what is best for your child.

If you are a young person with reflux, regurgitation or heartburn, your parent, carer or other family member may be involved in helping to make decisions, depending on your age.

There is a list of questions you can use to help you talk with your care team.

Some treatments or care described here may not be suitable for you. If you think that your treatment does not match this advice, talk to your care team.

Reflux in babies

Information about reflux

Some reflux – regurgitating or vomiting of feeds – is normal in babies. It usually gets better on its own, and doesn't often need any tests or treatment.
Reflux is very common. It affects nearly half (at least 4 out of 10) of babies younger than 1 year.

- Usually no tests or treatments are needed.
- It tends to start before the baby is 8 weeks old.
- It can happen a lot – some babies bring up milk 6 or more times a day.
- It normally happens less often as the baby gets older.
- It gets better on its own in most babies (9 out of 10) by the time they are 1 year old.

For more information, see the section what is meant by 'reflux, regurgitation and heartburn'?

**Seeing a healthcare professional**

If you see a healthcare professional about your baby’s regurgitation or vomiting, they will talk with you about your baby, their symptoms and their general health, and they may examine your baby. This is to make sure your child is well, and to check that there is nothing else that could be causing the problem. It will also help the healthcare professional decide whether any tests or treatments are needed or whether the problem will get better on its own.

The healthcare professional should talk with you about reflux and how common it is, give you advice and reassure you about it. This is because, for most babies, regurgitating feeds is completely normal and will disappear as the baby gets older.

If the healthcare professional thinks that there may be something else causing the vomiting or regurgitation, they may find it helpful to do tests (for more information, see the section what tests might be needed?), or they may refer your baby to a specialist.

Some symptoms of cows’ milk protein allergy can be similar to reflux symptoms, especially in babies who have eczema or asthma, or a family history of eczema or asthma. See other NICE guidance for details of our guidance on food allergy.

**When to take your baby back to the healthcare professional**

If your baby has any of the following problems, you should go back to see the healthcare professional:
If the regurgitation becomes more forceful. This is also known as 'projectile vomiting', and is when the vomit is expelled with such force that it lands some distance away.

If your baby brings up milk that is green or yellow-ish green (it could be bile, a bitter fluid that helps digestion), or if it looks as though it has blood in it.

If your baby has any new problems or if things get worse – such as if he or she won't stop crying or is very distressed, if your baby can't feed, if he or she stops putting on weight, or if reflux is still a problem in a baby older than 1 year.

**Helping babies with symptoms**

**Breast-fed babies**

For breast-fed babies who regurgitate often and are very distressed, for example, if they cry inconsolably and they seem to be in obvious pain, the healthcare professional should offer you a breastfeeding assessment with a trained person. This person may talk with you about how you feel breastfeeding is going, and provide help, advice and support if there are any problems.

If you have had a breastfeeding assessment and your baby's reflux hasn't improved, your healthcare professional may talk with you about trying a medicine called an alginate for a trial period of 1 to 2 weeks. Alginates may help to reduce reflux. If the alginate works then continue with it, but you should try stopping it from time to time to see if the baby's reflux has disappeared completely.

**Bottle-fed babies**

For bottle-fed babies who regurgitate often and are very distressed, for example, if they cry inconsolably and they seem to be in obvious pain, the healthcare professional should ask about how your baby is feeding. The healthcare professional might suggest changing the amount of milk, giving smaller feeds more often (but the same overall amount of milk), changing to a thickened feed or adding a thickener to the feed for a trial period. There are different products available that make the milk thicker. Your health visitor can give you more advice about how to give thickened feeds.

If your baby's reflux hasn't improved after you have tried these options, the healthcare professional may talk with you about trying a medicine called an alginate for a trial period of 1 to 2 weeks. Alginates may help to reduce reflux. If the alginate works then continue with it, but you should try stopping it from time to time to see if the baby's reflux has disappeared completely.
What if the treatment doesn't work?

Depending on your baby’s symptoms, the healthcare professional may suggest trying a medicine to stop the stomach producing as much acid. For more information, see the section medicines to reduce acid production.

Sleeping positions

Babies should always be put flat on their back to go to sleep. They should not be put onto their tummies or sides to go to sleep.

Reflux and heartburn in children and young people

Information about reflux

Reflux can affect children and young people, as well as adults, of all ages. Reflux happens to all of us from time to time, but when it causes painful symptoms that happen regularly, or additional problems, healthcare professionals call it acid reflux, gastro-oesophageal reflux disease, or GORD for short. For more information, see the section what is meant by ‘reflux, regurgitation and heartburn’?

Reflux can sometimes affect children and young people who have problems with their muscles and nervous system, such as cerebral palsy. It can also affect children who have asthma.

Being overweight can make reflux symptoms worse, so if a child or young person is overweight, losing weight may help. The healthcare team can give more help and advice about this. See other NICE guidance for details of our guidance on obesity.

Seeing a healthcare professional

If a child or young person has reflux, the healthcare professional will ask questions to find out as much as possible about the problem, and will ask specifically about their symptoms. The healthcare professional will also ask about how the child is generally, and if there are any other symptoms or health concerns. They may ask questions about the child’s previous medical history and your family history to find out if the child is at particular risk of reflux.
If the healthcare professional thinks that there may be something else causing the symptoms, they may find it helpful to do tests, or they may suggest seeing a specialist. For more information, see the section what tests might be needed?

**Medicines to reduce acid production**

There are 2 types of medicines that reduce acid production in the stomach. They are called 
$\text{H}_2$ receptor blockers (they are often called $\text{H}_2$RAs) and proton pump inhibitors (often called PPIs).

If babies or children regurgitate feeds or meals but do not have any other problems or symptoms (such as pain, crying and not wanting to feed), healthcare professionals should not offer medicines to reduce acid production.

However, if there are other problems or symptoms, the healthcare professional may sometimes discuss trying one of the medicines for 4 weeks to see if it helps the symptoms. They will take into account which would be the best type and formulation for the child’s age, your preference and/or your child’s preference, and also the cost of the medicine.

When the treatment stops after 4 weeks, if the symptoms have not gone, or if they come back when the treatment stops, then the healthcare professional may discuss referring the child to a specialist.

Sometimes reflux can cause severe irritation and inflammation of the oesophagus (the medical name for this is oesophagitis). The only way to diagnose oesophagitis with any certainty is to have an endoscopy. If your child has oesophagitis, a doctor should offer a course of treatment with a PPI or $\text{H}_2$RA to reduce the amount of acid in the stomach. Your child may need to have an endoscopy again after the treatment.

Healthcare professionals should not offer the medicines called metoclopramide or domperidone to treat reflux without speaking to a specialist and taking into account that these medicines can cause serious unwanted side effects.

**What tests might be needed?**

Usually, no tests will be needed.

However, if the healthcare professional thinks a test may be helpful, they will discuss this in more detail, and explain what you can expect. There are several tests that can be used, depending on your child’s age, symptoms and medical history.
Checking the amount of acid (pH monitoring)

This involves passing a small tube through the nose and down the throat so it can sit in the oesophagus and measure the amount of acid that comes back up over a 24-hour period. Your child will usually need to stay in hospital for this test. Occasionally, another test may be done at the same time through the same tube, to measure the pressure changes in the oesophagus.

Endoscopy

This involves using an endoscope (a narrow, flexible tube with a camera at its tip), to see down through a person’s throat and into their stomach and upper part of the intestine. At the same time, tiny crumb-sized samples from the oesophagus and stomach lining may be taken to be checked under a microscope for further information. Your child will need to have a general anaesthetic for this procedure.

Contrast study using X-rays

This involves having a drink containing a chemical that shows up on X-rays. After the child swallows the drink, an X-ray specialist takes a film of the drink passing through the digestive system. This test will not be used to show or assess reflux, but can show the shape and structure of the child’s digestive organs.

Surgery

For an extremely small number of babies, children or young people with severe reflux, surgery may be appropriate. If the healthcare professional considers that surgery might help, he or she may discuss referring the child to a specialist.

Questions to ask about reflux, regurgitation and heartburn

These questions may help you discuss your condition or the treatments you have been offered with your healthcare team.

About reflux, regurgitation and heartburn

- Can you tell me more about reflux, regurgitation and heartburn?
- What will happen to my child’s symptoms as time goes on? Could there be any other problems?
• Could anything else be causing the problem?

• Are tests needed?

• What can we as parents/carers do to help?

• Is there any additional support that we as parents/carers might benefit from or be entitled to?

• I don’t feel like I can cope any more – what can I do and who can I talk to?

**Treatment**

• Why you have decided to offer this treatment?

• What are the advantages and disadvantages of this treatment?

• How may it help? What effect will it have on my child’s symptoms? What sort of improvements might there be?

• How is the treatment to be taken?

• How long will it take to have an effect?

• What if the treatment doesn’t help?

• Are there any risks or side effects associated with this treatment?

• How long will the treatment be needed for?

• What other treatment options are there?

• Is there some other information (like a leaflet, DVD or a website I can go to) to find out more?

**Following up on treatment**

• When should my child start to feel better and what if there is no improvement?

• How often will the follow-up appointments be?

• Are there different treatments to try?

**Sources of advice and support**

• National Childbirth Trust (NCT), 0300 330 0700, www.nct.org.uk
You can also go to NHS Choices for more information, for example, to see a diagram of the digestive tract and what happens in reflux, and tips on how to soothe a crying baby.

NICE is not responsible for the quality or accuracy of any information or advice provided by these organisations.

Other NICE guidance

- Obesity (2014) NICE guideline CG189
- Food allergy in children and young people (2011) NICE guideline CG116