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Babies - Reflux & Gastroesophageal reflux disease (GERD/GORD)

Reflux is a process that can occur in babies and adults, and is the term used to describe the movement of the gastric contents back up into the oesophagus.

Food moves from the mouth to the stomach via the oesophagus, which consists of various layers of muscle that contract, propelling the food forward. Where the oesophagus joins the stomach, a ring of muscle is found, called the lower oesophageal sphincter (LOS). When food reaches this sphincter, it relaxes and allows the food to enter the stomach. The LOS then contracts again to prevent acid and food from moving back into the oesophagus. It is when this sphincter does not close properly, that the stomach contents can move back or 'reflux' into the oesophagus.

Gastroesophageal reflux is common during the first few weeks of life, with babies experiencing at least one episode of "spitting up" daily. This is considered to be normal, and is often defined as uncomplicated gastroesophageal reflux. By about one year of age, reflux will normally have resolved.

But when is this occurrence not considered normal anymore? Reflux

becomes known as GERD or GORD when acid in the reflux starts to cause damage to the oesophagus. These babies often fail to thrive, they do not gain weight, refuse to eat, and forceful or projectile type vomiting can occur.

There are various options that may be considered in the treatment of babies with GERD.

1. Thickening feeds
Milk-thickening agents seem to improve the reflux symptoms. Regurgitation in infants is significantly reduced with a thickened feed. Thickening the milk can also increase the amount of kilojoules a baby receives, assisting in weight gain in babies who have previously failed to thrive. Rice cereal is usually used to thicken formula or breast-milk.
2. Milk-free diet
Up to 40% of babies with GERD have been reported to have an intolerance to cow's milk protein. These babies often show intolerance to soy proteins as well, and a breast-feeding mother should eliminate all milk and soy proteins from her diet. If a baby's reflux

symptoms improve after a two to three week trial period, the diet can be continued up until one year of age or when breast-feeding is stopped. Formula fed babies should be given a hypoallergenic formula such as a partially hydrolysed formula or a soy protein-based formula may be considered.

3. Positioning after feeding
The baby should be kept upright for 20 to 30 minutes after a feed. Overfeeding should also be avoided.

If symptoms do not improve after these measures have been put into place, a doctor can prescribe medication to aid in the inhibition of stomach acid production e.g. lansoprazole and omeprazole. Treatment is discontinued after a few weeks if no improvement is seen.

Infants with reflux need to be referred to a healthcare professional should these following signs and symptoms also occur: delayed weight gain, crying for more than two hours, refusing to eat or drink for a prolonged time, bloody stools, recurrent vomiting.

Toddlers - Sore throats

During the wintertime, parents will often visit the pharmacy for help regarding a child with a sore throat. Seeing that there are various possible causes, a correct overview of the situation is required to determine the best choice in treatment.

Both viral and bacterial organisms can cause throat infections. More often than not, these infections will clear by themselves, although treatment with an antibiotic is sometimes required for a bacterial throat infection. There are, however, a few rare and serious causes of sore throats that need to be identified and referred for appropriate management.

Viruses

Various viruses can cause a sore throat, e.g. influenza, adenovirus and the Epstein-Bar virus. Other symptoms that can present in a child complaining of a sore throat include a runny nose, hoarseness, coughing and red eyes. Sore throats caused by viruses

usually clear in 4 – 5 days, and antibiotic treatment is not effective.

Bacteria

Strep throat is caused by a Group A streptococcus bacterium. Although other bacteria can also cause throat infections, this is by far the most common cause, especially in school-going children and their siblings. Besides the sore throat, symptoms include a temperature, headache, nausea and vomiting. Antibiotic treatment is required. Symptoms should start to improve within 2 days of appropriate antibiotic treatment.

Other medications can also be recommended to help relieve the symptoms, e.g. pain medication like paracetamol and ibuprofen. Medicated lozenges, oral rinses or throat lollies can also be given.

Special attention should be given to oral rehydration, as children with sore

throats often do not want to eat or drink.

A more serious cause of a sore throat is epiglottitis. This is usually caused by *Haemophilus influenzae* type B (Hib) virus, and causes severe inflammation of the epiglottis and surrounding tissue, to such an extent that breathing can be obstructed. Immediate referral to a healthcare professional is required. Due to Hib vaccination, this condition is rarely observed.

Diphtheria can also cause obstruction of the airway as a thick membrane can form in the back of the throat. This disease is also preventable by vaccination.

Children with a sore throat should be referred for further medical evaluation if one or more of the following signs and symptoms are present:

- Temperature of 38.3 degrees or higher
- Difficulty breathing or swallowing
- Stiff neck
- Difficulty in opening mouth

