

# Paediatric GORD Medications and How to Use Them



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**This information is not intended as a substitute for professional medical advice and if you have questions or concerns regarding your physical or mental health, or the health of your baby, please seek assistance from your qualified and licensed health professional.** See our disclaimer.

Medication is NOT the first line of defence in helping a child with GORD, but when you've tried all the management strategies under the sun and it's still not working, your doctor may prescribe one or a combination of the medications listed below.

## Proton Pump Inhibitors (PPIs)

Common brand names: Losec, Nexium, Somac, Zoton

What they do: they inhibit (or almost eliminate) stomach acid production.

How to use them:

- PPI tablets are made up of small pellets covered in enteric coating which helps the small pellets get through the stomach to do their work. **They must not be chewed or crushed.** If your child is too young to take a tablet, the tablet may be dispersed in non-carbonated water or juice [4][5].
- You may disperse it in a small amount of water, and then add it to a spoonful of pureed apple, pear or yoghurt (if appropriate). If using something other than water, it must be slightly acidic and soft enough so that the child won't chew it [4].
- Do NOT use milk/breast milk or formula in place of water, as it isn't acidic.
- The tablet will not dissolve completely in liquid as the small enteric-coated pellets containing the active ingredient will remain intact. Take care not to crush these pellets.
- Once the tablet is dispersed in liquid, it must be consumed immediately or within 30 minutes.
- Many parents find that dispersing the tablet in a small amount of liquid in a syringe makes it reasonably simple to give.
- If a child vomits with their reflux, PPIs will not change that. PPIs suppress acid production in the stomach so that any vomiting will not hurt as much [8].
- Don't forget, a child who is able to take solids may be partial to the "jammy spoon" trick – i.e. pop the tablet in some jam on a spoon and it may be surprisingly easy to administer.
- Studies show that discontinuing PPIs abruptly may cause the stomach to make higher amounts of acid. It is recommended to wean the dose rather than stopping abruptly [2].
- Omeprazole can also be administered using a suspension, made up at a compounding pharmacy. Flavouring may be added to the suspension to make it more palatable for baby. If your baby has certain food or chemical intolerances this flavouring may cause problems. Ask if the suspension can be made without it, or have an alternative flavour used in this instance. It is important to shake the bottle well before each use. Omeprazole suspension can have a short shelf life, so make sure you check with the pharmacist to find out what it is. If it is made with bicarb, it can be as little as 10-14 days (and may make baby very windy); and if made with cellulose gel, it can be as much as 45 days if stored in the refrigerator [9]. Numerous RISA parents have reported that they have found the suspension less effective than the tablets.

Recent research: Research suggests that PPIs are highly effective and have a wide safety margin for treating acid-related disorders in children [1]. They are more potent acid suppressants and longer acting than H-2 Blockers [8]. However, children metabolise these drugs more rapidly than adults and as a consequence may require more frequent doses and higher doses for their weight than an adult would require [1][2][3][6][7].

## **H-2 Blockers**

Common brand names: Zantac, Ranitidine

What they do: they suppress stomach acid production using a different method than PPIs.

How to use them: Administer prescribed dosage with syringe. Taste can be an issue.

General: H-2 Blockers are generally more effective than antacids but not as effective as PPIs[1][8]. One of the problems with these drugs in children is that they develop tolerance very rapidly to these types of drugs and this can happen in as little as one week [1]. If prescribed in conjunction with a PPI, don't give them at the same time. The H-2 Blocker can stop the PPI from working. Leave 4 hours between doses of the different medications [1]. Use of H-2 blockers could theoretically reduce absorption of iron and vitamin B12 causing anaemia or pernicious anaemia [2].

## **Antacids [8]**

Common brand names: Mylanta, Gastrogel

What they do: Give short term relief for intermittent symptoms.

How to use them: They can affect the absorption of other medications so if possible do not give with other medications and consult your pharmacist or health care professional.

General: Mylanta Original Formulation is suitable for use in children from one month of age. Other formulations may not be suitable. Ask your pharmacist or doctor for the correct dosage.

## **Alginates / Thickening agents [8]**

Common brand names: Infant Gaviscon (NOT Liquid Gaviscon which is not recommended for children).

What they do: reduces regurgitation by thickening the contents of the stomach and making it more difficult to relax the oesophagus.

How to use them: Infant Gaviscon should not be used with other thickening agents or thickened formula as it can make the stomach contents too thick.

## **Prokinetic agents (motility medications) [8]**

Common brand names: Motilium, Maxalon, erythromycin, domperidone

What they do: help move food through the intestinal tract more quickly and hasten stomach emptying.

How to use them: as directed. Do not administer at the same time as other medications unless specifically told to do so.

## **Analgesia (over the counter) [8]**

Common brand names: Paracetamol (Pandol, Dymadon) or ibuprofen (Nurofen, Advil, Fenpaed)

What they do: Provide additional pain relief.

How to use them: As directed and not for longer than 48 hours unless directed by a doctor.

General: Paracetamol should be used in preference to ibuprofen in children with gastrointestinal issues if there is a history or higher likelihood of gastrointestinal bleeding, ulcers or asthma. Ibuprofen is also more likely to upset your child's tummy.

For further information on giving medication, reducing medicine costs and weaning from medications, consult Reflux Reality: A Guide for Families.

## **References:**

- [1] Phillips J, Pharm D, Turpin, S, Chapter 13 "The Use of Medications in Acid Reflux Disease" in Acid Reflux in Infants & Children by Tracy & Mike Davenport, 2007.
- [2] Gambino, J; Reflux 101: A Parent's Guide to Gastroesophageal Reflux; 2008 pg 221 (Reference re higher dosages and frequency + reference re weaning slowly), pg 221.
- [3] Pulsifer-Anderson, B; The Reflux Book: A Parent's Guide to Gastroesophageal Reflux; 2007, pg 95.
- [4] Information supplied to RISA Inc by Astra Zeneca; 2010.
- [5] Losec Tablet Product Information; Astra Zeneca, 28 September 2012.
- [6] Phillips J et al, "Infants Have Shorter Half Life for Lansoprazole Than Previously Reported"; at [www.infant-acid-reflux-solutions.com](http://www.infant-acid-reflux-solutions.com).
- [7] Phillips J et al, "Flavored Lansoprazole in Pediatric GERD"; at [www.infant-acid-reflux-solutions.com](http://www.infant-acid-reflux-solutions.com).
- [8] Blanch, G; Reflux Reality: A Guide for Families; 2010. pg 129.
- [9] The information contained in this paragraph has come from several pharmacists.