

Proton Pump Inhibitors (PPIs) in Infants



Appropriate Use. Appropriate Timing. Appropriate Patients.

How Do PPIs Work?

Proton pump inhibitors (PPIs) block gastric proton pumps, which are found in parietal cells in the gastric epithelium. This action reduces acid secretion and increases gastric pH.



PPIs reduce gastric acid production



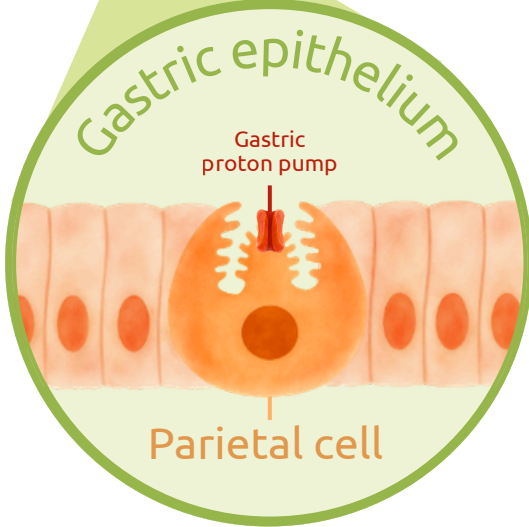
PPIs do not reduce the number of reflux episodes



PPIs do not prevent regurgitation



PPIs help heal acid-mediated oesophageal injury



Infant Reflux is Usually Normal

Common in healthy infants:

- Regurgitation/spitting up
- Possetting after feeds
- Settled between feeds
- Normal growth
- No feeding difficulties

Most infant reflux resolves naturally with maturation, whereas gastroesophageal reflux disease (GERD) is a chronic condition.

Consider further evaluation if there is:

- Poor weight gain
- Feeding refusal
- Haematemesis
- Persistent pain with feeding
- Chronic respiratory symptoms
- Evidence of oesophagitis



✓ When to Prescribe PPIs

Appropriate indications include:

- Confirmed reflux-related oesophagitis
- Acid-mediated symptoms consistent with GERD when symptoms and/or investigations support pathological reflux
- Specialist-directed treatment following gastroenterology assessment when clinically indicated.



Use the lowest effective dose for the shortest appropriate duration.

✗ When NOT to Prescribe PPIs

PPIs are generally NOT indicated for:

- Isolated regurgitation
- Uncomplicated spitting up
- Crying alone
- Irritability alone
- Colic-like symptoms
- Unexplained unsettled behaviour without evidence of GERD



Studies have shown limited benefit of PPIs for common infant symptoms in the absence of proven acid-mediated disease.



BIRTH TO ≤1 MONTH

- Specialist assessment usually required
- Consider alternative diagnoses first



1 TO 12 MONTHS

- Focus on distinguishing physiologic reflux from GERD
- Short-term PPI use only when clinically indicated



>12 MONTHS

- Management increasingly resembles older paediatric GERD pathways
- Reassess need for ongoing therapy

Clinical Reminder

Regular review is essential at every age.



Reflux ≠ GERD

Not all reflux requires medication

Before Prescribing

Ask yourself:

1. Is this likely physiologic reflux?
2. Are there alarm symptoms?
3. Have conservative measures been optimised?

ONLY proceed to medication when the answers support GERD rather than normal infant reflux.

Safety & Stewardship



Good prescribing practice:

- ✓ Confirm indication
- ✓ Review response
- ✓ Stop if ineffective
- ✓ Avoid prolonged empiric use
- ✓ Reassess regularly

PPIs are valuable medicines when used for appropriately selected infants, but unnecessary use should be avoided.

Alternative Reflux Management Strategies

Non-pharmacological management should be **optimised first** in most infants.



Step 1

REVIEW FEEDING

- Avoid overfeeding
- Review feeding volumes
- Consider feeding frequency adjustments



Step 2

THICKEN FEEDS

- Thicken feeds where appropriate



Step 3

BREASTFEED SUPPORT

- Breastfeeding support and technique review



Step 4

EVALUATE ALLERGIES

- Evaluate cow's milk protein allergy where clinically suspected



Step 5

REASSESS

- Reassess before considering pharmacotherapy

3

THINGS TO REMEMBER

Most infant reflux is physiological

PPIs reduce acid, not reflux events

Reserve PPIs for infants with evidence of GERD or reflux-related oesophageal disease