

## Proton Pump Inhibitor treatment for Children

Proton Pump Inhibitors (PPIs), for example omeprazole, Lansoprazole and esomeprazole, are used in the treatment of reflux oesophagitis (discomfort caused when stomach contents are brought up after feeding) and stomach ulcers. During reflux the stomach acid causes irritation of the food pipe (oesophagus), which is often painful. PPIs are used to reduce the amount of acid made by the stomach, which helps to reduce the irritation and protect the food pipe.

***PPIs come in various formulations: tablets, dispersible tablets, granules, liquid (licensed and unlicensed).***

### Liquid PPI is less clinically effective than other formulations:

PPIs are destroyed when they reach the stomach, due to the acid environment. For this reason, the tablets, dispersible tablets and granules are specially coated to protect the medicine from the stomach acid. However, liquids do not have this special coating which means they will not work so well for your child.



### When and how should I give the medicine:

- PPIs are usually taken once or twice a day.
- Can be given with food or on an empty stomach.
- Each tablet, capsule, or granules are made of compressed beads which have a special coating to protect the medicine from the stomach acid. It is very important that the beads are not crushed or chewed as this stops the medicine from working properly.
- Children who can't swallow tablets:
  - **Dispersible tablets**- break the tablet and disperse it in a spoonful of non-fizzy water. If you wish, mix with some fruit juices or applesauce. The dispersion should be taken immediately (or within 30 minutes) and always be stirred just before drinking and rinsed down with half a glass of water. **DO NOT USE** milk or fizzy water. The capsule pellets must not be chewed.
  - **Capsules** - open the capsule and swallow the contents with half a glass of water or after mixing the contents in a slightly acidic fluid e.g. fruit juice or applesauce, or in non-fizzy water. The dispersion should be taken immediately (or within 30 minutes) and always be stirred just before drinking and rinsed down with half a glass of water. Alternatively, capsule can be sucked, and the pellets swallowed with half a glass of water. The capsule pellets must not be chewed.
  - **Granules**- contents can be mixed with water, do not use fizzy water. Stir the contents until the granules have dispersed and leave for a few minutes to thicken. Stir again and drink within 30 minutes. The granules must not be chewed or crushed. Rinse with a little water and drink, to obtain all granules.

*The dose for children is based on the child's weight and the doctor will decide the correct dose.*

*Whilst on a PPI you can give your child medicines that contain paracetamol or ibuprofen, however for other medications check with your doctor or pharmacist.*



### When should the medicine start working:

PPIs start working straight away and your child should start to have less discomfort and less reflux. It may take up to 4 weeks for a PPI to work fully, so your child may still have some symptoms during this time. If you are not sure whether the medicine is working, contact your doctor.

### Child vomits:

If the child vomits less than 30 minutes after giving a PPI, give them another dose. If the child vomits more than 30 minutes after giving the PPI, do not give another dose, wait for the next normal dose. If the child is sick again seek advice from doctor or pharmacist.

### Possible side effects:

We use medicines to make our children better, but sometimes they have other effects that we don't want. PPIs are safe medicines, and most children can take them without having any side effects.

#### **More serious side effects (Contact doctor as soon as possible if any of the following occur):**

- muscle pain or weakness, 'pins and needles'
- dizziness
- changes in sleep patterns
- mood changes
- increase in breast size (males)
- fever
- increased bruising
- black stools or vomit that looks like coffee grounds
- signs of liver inflammation including yellowing of the skin or eyes, feeling generally unwell, nausea, vomiting, loss of appetite.

#### **Less serious side effects include:**

- nausea and/or vomiting
- diarrhoea or constipation
- headache
- abdominal pain
- flatulence

***If your child develops a rash, swelling of the face, lips, tongue, or throat, or has difficulty breathing or swallowing, they may be allergic to the medication. Contact your doctor or take your child to hospital straight away.***

