

Propranolol for treating haemangiomas

Haemangiomas of infancy (infantile haemangioma, strawberry birthmark)

Haemangiomas are a common form of blood vessel birthmark. They are caused by benign growth of capillaries (small blood vessels) in the skin.

Typically haemangiomas are not fully grown at birth, but appear in the first few weeks of life and then grow rapidly. Without treatment the growth continues for a few months, then the haemangiomas slowly shrink over the next few years, so that most have disappeared by the time the child starts school.

Why do we treat haemangiomas?

Most haemangiomas do not require any treatment, and will gradually resolve.

However some haemangiomas can cause problems because of where they are on the body, or because of ulceration and infection. Haemangiomas that should be considered for treatment include those:

- Affecting the airway and breathing
- Near the eye or blocking vision
- On the mouth or lip, causing interference with feeding
- In the nappy area, where they may become ulcerated
- In cosmetically sensitive areas – such as the nose, lip, cheek, ear

How do we treat haemangiomas?

Treatment of haemangiomas in the past has been with surgery or with use of high dose steroids or chemotherapy agents. The side effects of these medicines have meant that treatment has been reserved for the most serious cases.

Recently beta blockers have been found to be a more effective way of treating haemangiomas, with fewer side effects. Studies following babies who were treated with propranolol have not identified problems with cardiovascular or brain development up to 6 years of age.

What is propranolol?

Propranolol is a beta blocker and is a medication that has been used for many years in children to treat other conditions, such as high blood pressure and migraines. It is thought to work by affecting some factors which promote growth of haemangiomas.

The most common side effects of propranolol are sleep disturbance, cool peripheries and diarrhoea. Low blood pressure, low blood sugar, slowing of the heart rate and wheezing are rare problems. Some particularly small infants or those with other health issues may need to start propranolol with monitoring at the hospital. However the vast majority of infants tolerate the medicine well, and shrinking of the haemangioma can become evident within days to weeks of starting treatment.

What is involved with giving propranolol at home?

Propranolol is usually given twice a day, once in the morning, and once in the late afternoon. Because it can affect blood sugar it should be given during or just after a feed. If they spit it out do not give a second dose.

If your baby is unwell and not able to eat (for example if they have a vomiting illness), then the propranolol should be stopped until they are feeding again.

If for some reason your baby develops low blood pressure or low blood sugar, this will make them pale, sweaty and floppy. You should offer a feed and seek urgent medical attention if you are concerned about this. However, this is very uncommon and most infants tolerate propranolol very well.

Most children need to continue treatment for several months or even more than a year. It is safe to stop propranolol, however sometimes the dose is reduced over a period of weeks to help prevent rebound growth.