# FACTSHEET

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## **Haemangiomas of infancy**

## What are haemangiomas of infancy?

Haemangiomas of infancy are common birthmarks consisting of an overgrowth of some blood vessel cells. They usually appear in the first three weeks of life.

# What do they look like and what happens to them?

The look of a haemangioma of infancy depends on whether the production of small blood vessels occurs close to the skin surface or deeper in the skin. When the over growth of blood vessels occurs close to the skin surface, the earliest sign is the appearance of dilated capillaries and small red dots on an area of paleness. These dots enlarge, and join together to form a solid red (strawberry like) lump. When the overgrowth of blood vessels occurs deeper in the skin, a blue or skin coloured swelling develops. Infants can have either a superficial (strawberry like) lesion, a deeper lesion or a mixture of the two.

Haemangiomas of infancy can grow for 3-6 months. Deeper lesions usually grow for longer than superficial lesions.

Within 6 months of the end of growth, the blood vessels within the haemangioma of infancy start to close, resulting in a gradual shrinking of the lesion during infancy and childhood. The appearance of greyish areas on the surface of the haemangioma of infancy means that the blood vessels are starting to shrink. Most lesions have stopped improving by 4 years of age.

## What is the cause of haemangiomas?

The cause of haemangiomas of infancy is not fully understood. The cell of origin seems to be a stem cell although other cells are also implicated. There are some myths, especially among Mediterranean populations, that these birthmarks are caused by the mother wishing for something red and then touching a part of her body, with the mark appearing in this area of the baby. There is no truth in this.

# Do haemangiomas always disappear without a trace?

Although some haemangiomas of infancy completely resolve, others resolve leaving lasting skin changes. Haemangiomas of infancy that can leave lasting skin changes are those that ulcerate during the time of rapid growth or large lesions with both a steep red and a blue component. Ulceration often leaves scarring particularly on the lip, eyelid and nose. Large haemangiomas of infancy can leave stretched, wrinkled fibrofatty skin. Large lesions on the end of the nose can damage the shape of the nose.

# Do haemangiomas bleed badly if they are injured?

Significant bleeding is very unusual because they are composed of very small blood vessels. Deep ulceration can expose a larger deeply placed blood vessel.







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### Are there any more serious complications?

Sometimes haemangiomas of infancy can interfere with the function of vital structures.

#### Eyes

A haemangioma that closes the eye or presses on the eye in the early weeks of life can produce a permanent visual impairment.

#### Mouth

Large haemangiomas around the mouth may interfere with sucking and feeding.

#### Nose

Lesions blocking both nostrils will interfere with feeding.

#### **Breathing passages**

The breathing passages may be directly involved with a haemangioma of infancy. The possibility of this should be considered whenever there is an extensive lower facial or neck haemangioma especially if there is also haemangioma inside the mouth. If a baby with a haemangioma in this area makes noises when breathing **urgent medical attention** should be sought.

## What is the treatment for haemangiomas?

Wait and watch: Usually no treatment is needed because they are often uncomplicated and disappear slowly. Your doctor may be able to show you photographs of disappearing haemangiomas in other children to give you encouragement.

#### Propranolol

Propranolol is now the preferred treatment for haemangiomas requiring treatment to preserve a vital function (sight, hearing) and/or to prevent long term disfigurement of the skin. .It is a medication that has been used for many years to treat blood pressure and more recently to treat migraine and tremors. It is very effective in preventing further growth of the haemangioma and speeds up involution (shrinking) of the lesion. Infants need a cardiac evaluation prior to starting treatment and their blood pressure/heart rate is closely monitored during the early stages of treatment. It should only be prescribed by a paediatric or dermatologist specialist. Propranolol can dampen the infants response to low blood sugar and the infant needs to have close monitoring of blood sugar levels if unwell and not eating or drinking.

#### Corticosteroids

This is now only used if the infant is not responding to propranolol or is unable to have propranolol. It will slow the growth of the haemangioma and is only useful during the growth phase of the haemangioma. It has no effect on the involution (shrinkage) of the haemangioma. The use of high doses of corticosteroids in young children is best managed by a paediatric specialist.

#### **Specialised dressings**

A range of new dressings are now available which help heal ulcerated haemangiomas.

#### Surgery

This may be required to deal with a loose sac of tissue or a fatty deposit that remains.

#### Laser

Lasers are mainly used mainly for port wine stains which are another type of blood vessel birthmark. Occasionally they are useful in speeding the healing of a very bad ulcer. They may be helpful for remaining visible vessels in the older pre-school child.

#### Conclusion

In most cases haemangiomas are uncomplicated and go away completely. It is often hard for parents to cope with the look of haemangiomas as they view it as a disfigurement. Support and counseling of parents towards acceptance of the condition is needed. The appearance is usually much improved by the time the child is old enough to be really aware of it.

Some haemangiomas are potentially very serious or can lead to results that are far from perfect. Seek specialist attention if you feel that your baby's haemangioma may be a worrying or dangerous one.

#### **Remember:**

- In most cases haemangiomas are uncomplicated and go away.
- However, if your baby's haemangioma is growing rapidly, is forming an ulcer, is on the lip, near the eye or on the tip of the nose or if your baby is having difficulty breathing please seek immediate medical attention.