



THE AUSTRALASIAN COLLEGE  
OF DERMATOLOGISTS

## Infantile Haemangiomas

**Also known as...** Strawberry Birthmarks

### What are infantile haemangiomas?

Infantile haemangiomas are the most common benign growths of infancy and childhood, affecting 2.6% to 4% of babies by 6 weeks of age.

### What causes infantile haemangiomas to develop?

The cause of infantile haemangiomas is not well understood, but the placenta is considered to play a role.

Certain risk factors including being female (incidence of females to males is 2:1), prematurity (being born early), low birth weight, vaginal bleeding early in the pregnancy and an amniocentesis (a test carried out in early pregnancy) are thought to play a role.

### What do infantile haemangiomas look like?

Infantile haemangiomas may look like a patch of white skin with a few visible blood vessels on the surface. In many cases it is not noticed at birth.

Within 1 to 3 weeks of birth the blood vessels start to multiply and divide and the haemangioma develops into a bright red strawberry colour.



Superficial haemangioma – image reproduced with permission of Dr Anne Halbert

If the blood vessels extend deeper into the skin, there will be the appearance of a bluish swelling underneath the skin.



Mixed haemangiomas – image reproduced with permission of Dr Anne Halbert

In some cases the haemangioma may present as a bluish swelling only, without the accompanying strawberry coloured overlay.



Deep haemangiomas – image reproduced with permission of Dr Anne Halbert

The haemangioma grows rapidly in the first 8 to 12 weeks after which it slows and stops growing at 4 to 9 months of age. A dulling of the colour indicates the beginning of the regression phase. The time it takes to improve depends on the size of the haemangioma however most have regressed by 4 to 5 years of age.

Despite significant improvement in all cases, the skin may not return to normal, particularly if the haemangioma had been very raised. The skin may be left stretched and wrinkled with some soft fatty tissue and a few surface blood vessels.

### **What other problems can occur with infantile haemangiomas?**

Infantile haemangiomas which affect large areas of the face can be associated with a range of abnormalities of the brain, heart, major blood vessels and eyes (PHACE syndrome).

Large lesions over the lower back and buttocks may be associated with spinal cord and kidney abnormalities (LUMBAR or PELVIS syndrome).

### **How are infantile haemangiomas diagnosed?**

Small or focal haemangiomas do not require any further formal testing.

Haemangiomas affecting large areas of the face require an MRI/MRA of the brain, eye review and a cardiology review with echocardiography.

Large lower back or buttock haemangiomas may require an ultrasound of the spinal cord and genitourinary tract followed up by an MRI (Magnetic Resonance Imaging) test.

Multiple haemangiomas (more than 5) require an ultrasound of the liver to be performed.

Haemangiomas near the eye need to be monitored by a paediatric eye surgeon (ophthalmologist), as partially blocked vision can lead to permanent eye damage.

Haemangiomas over the lower cheek or chin and neck (the so-called “beard distribution”) will need to be reviewed by an ear nose and throat (ENT) surgeon as haemangiomas can be associated with airway obstruction.

### **How are infantile haemangiomas treated?**

The vast majority of small haemangiomas do not need any form of treatment.

Small red haemangiomas on cosmetically important sites can be treated with a topical beta blocker such as timolol 0.5% eye drops.

Haemangiomas blocking vision or blocking the airway, ulcerated lesions or rapidly growing lesions on cosmetically important sites can be treated with oral medication such as propranolol. Switching off the growth phase of the haemangioma as soon as possible ensures a better cosmetic result, by reducing the risk of scarring and the need for later surgery.

Injected and oral steroids are rarely used. Pulsed dye laser may be needed to clear remaining blood vessels at the conclusion of treatment and prior to the child commencing school.

This information has been written by Dr Anne Halbert