



# Haemangioma

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# Objectives

- Definition
- Types
- Causes
- Diagnosis
- Treatments

# Haemangioma

- A haemangioma haemangioma is a usually **benign vascular tumor** derived from blood vessel cell types.
- The most common form, seen in infants, is an infantile hemangioma, known colloquially as a "strawberry mark", is a bright red birthmark that shows up at birth or in the first or second week of life. It looks like a rubbery bump and is made up of extra blood vessels in the skin.
- A haemangioma can occur anywhere on the body, but most commonly appears on the **face, scalp, chest or back**.
- **Treatment for a baby's haemangioma** (infantile haemangioma) usually **isn't needed** as it fades over time.
- A child who has this condition during infancy usually has **little visible trace of the growth by age 10**, a haemangioma **treated if it interferes with seeing, breathing or other functions**.

# Types of Haemangiomas

- Strawberry Haemangioma
- Cavernous (Deep) Haemangioma
- Compound Hemangioma

# strawberry hemangioma

- A strawberry haemangioma is a clump of tiny blood vessels that forms under the skin. It causes a raised red skin growth that may be present at birth or develop during infancy. A hemangioma looks like a strawberry [birthmark](#), but it's actually a benign (noncancerous) tumor.
- The tumor often grows for the first year and then shrinks, usually without treatment. About 10% disappear by the child's first birthday. Of the rest, 90% of Haemangiomas fade away by a child's 10th birthday.
- Haemangiomas are most common in children. They are not usually visible at birth. Instead, they usually show up during the first few days or months of life. They can appear on any part of the body, but they are most common on the head or face.
- When they first show up, they can grow very quickly. Later on, they usually shrink and eventually disappear.
- Infantile Haemangiomas are the most common vascular tumors. As many as 1 in 10 babies develop a hemangioma. Some children have more than one hemangioma.

# Types of Haemangiomas

There are different types of Haemangiomas, including:

- **Superficial (capillary) Haemangiomas** form just underneath the top layer of skin (the epidermis). Strawberry Haemangiomas are a type of superficial hemangioma.
- **Cavernous Haemangiomas** go deeper into the skin's bottom fatty layer (hypodermis). The skin may bulge and have a blue or purple tint. A deep hemangioma can be painful and prone to bleeding.
- **Mixed Haemangiomas** have the strawberry look as well as a skin bulge.





# Can adults get strawberry Haemangiomas?

- In adults, this benign growth of blood vessels is a **cherry angioma**.
- The **round, cherry-red spots** may be smooth or raised. They typically appear on a person's trunk after age 30.
- Around **3 in 4 people over age 75 have them**. Because they're so common with aging, they're also called senile angiomas.

Angioma vs Hemangioma		
More Information Online <a href="http://WWW.DIFFERENCEBETWEEN.COM">WWW.DIFFERENCEBETWEEN.COM</a>		
	Angioma	Hemangioma
DEFINITION	An angioma is a benign growth made up of blood vessels or lymphatic vessels arranged in an abnormal pattern	Hemangiomas are an extremely common variety of tumors characterized by increased numbers of normal or abnormal blood filled vessels
SPECIFICITY	This is a broad term that describes a set of benign tumors with different origins	This term is used to describe the benign tumors arising from the blood vessels



## Vascular Lesions

### Spider Angioma\*



### Spider Vein\*



### Cherry Angioma



#### Color and Size

Fiery red. From very small to 2 cm

Bluish. Size variable, from very small to several inches

Bright or ruby red; may become purplish with age. 1–3 mm

#### Shape

Central body, sometimes raised, surrounded by erythema and radiating legs

Variable. May resemble a spider or be linear, irregular, cascading

Round, flat or sometimes raised, may be surrounded by a pale halo

#### Pulsatility and Effect of Pressure

Often seen in center of the spider, when pressure with a glass slide is applied. Pressure on the body causes blanching of the spider.

Absent. Pressure over the center does not cause blanching, but diffuse pressure blanches the veins.

Absent. May show partial blanching, especially if pressure applied with edge of a pinpoint

#### Distribution

Face, neck, arms, and upper trunk; almost never below the waist

Most often on the legs, near veins; also on the anterior chest

Trunk; also extremities

#### Significance

Liver disease, pregnancy, vitamin B deficiency; also occurs normally in some people

Often accompanies increased pressure in the superficial veins, as in varicose veins

None; increases in size and numbers with aging



## Causes strawberry Haemangiomas?

- It's a myth that **foods or stress cause any type of birthmark** in pregnancy.
- Strawberry Haemangiomas form **when blood vessels and cells close to the skin don't develop as they should**. Instead, the vessels clump together into a noncancerous mass or tumor.

## Risk factors for strawberry Haemangiomas

Any child can have a strawberry hemangioma, but these factors may increase the risk:

- **Female sex**. Haemangiomas **are two to three times more common among females than males**.
- **Low birth weight** (less than 5½ pounds).
- **Multiple birth** (twins, triplets or more).
- **Premature birth** (before the 37th week of pregnancy).
- **White race**.

# Strawberry Haemangiomas treatment

Many children with strawberry Haemangiomas **don't need treatment**. Patient may recommend early treatment if the hemangioma:

- Affects vision, hearing, **breathing, eating or other body functions**.
- Grows rapidly or is large.
- Significantly **affects appearance**.

## **Hemangioma treatments include:**

- **Beta blockers** Superficial Haemangiomas can be treated by applying a gel (timilol) on the affected area. Severe hemangioma may be treated with oral solution (of propranolol).
- Laser treatments.
- Surgical removal.
- Cryotherapy
- Sclerosing agent like bleomycin mixed with ethiodized oil.

## Complications of strawberry Haemangiomas

Most strawberry Haemangiomas are **harmless**. But some Haemangiomas do cause problems if they:

- **Form near the eye**: These Haemangiomas may **spread into the eye socket and press on the eye, affecting vision**. They raise the risk of problems like glaucoma or lazy eye (amblyopia).

- **Form inside the mouth**: Strawberry Haemangiomas in or near the mouth can **spread into the airways, interfering with breathing and eating**. Medications can shrink these tumors.

- **Are fragile**: The skin on a hemangioma may **break open easily when bumped**. These wounds often take longer to heal, which increases the risk of infection.

- **Affect self-esteem**: A hemangioma on the face may affect a child's self-confidence, especially if peers tease them. They may become depressed or anxious.

# Cavernous (Deep) Haemangioma

- A cavernous haemangioma is an **abnormal tangle of tightly packed, thin-walled capillaries** that are prone to bleeding.
- The thin walls of these capillaries make Haemangiomas **prone to bleeding**. The blood within the capillaries is usually **slow-moving or not moving at all**.
- Cavernous Haemangiomas mostly occur in **brain or brainstem**, but can sometimes occur in **spine** or other areas of your body. Bleeding in your brain can cause seizures or a stroke.
- Also occurs in other parts of body **skin, liver, eye, mouth**
- Cavernous Haemangiomas can **affect about 1 in 200 people**. They're usually **discovered between the ages 20 and 30 years old**. Although they are quite common, **only 1 in 10 people will ever develop symptoms**.



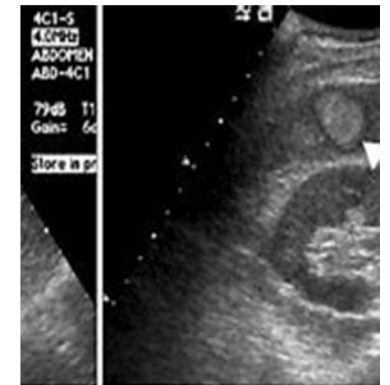
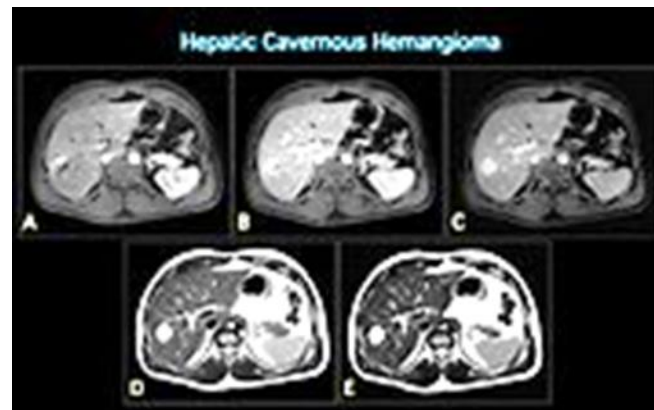
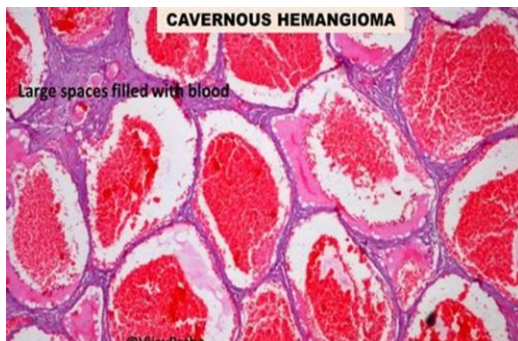


## Causes

- Most cases of cavernomas are thought to be **congenital**; however they can develop over the course of a lifetime.
- While there is **no definitive cause**, research suggests that **genetic mutations** result in the condition.
- Congenital Haemangiomas that appear on the skin are known as either vascular or red birthmarks.

## Diagnosis

- **Magnetic Resonance Imaging (MRI)** Is Most Sensitive Method For Diagnosing Cavernous Haemangiomas
- **Computed Tomography (CT) Scanning** Is Not A Sensitive Or Specific Method For Diagnosing Cavernous Haemangiomas Modified By **CT angiography** uses a CT scanner to produce detailed images of both blood vessels and tissues in various parts of the body. During the exam, contrast material is injected through a small catheter placed in a vein of the arm.
- **Biopsies.**
- **Ultrasonic**



# Treatment

- Asymptomatic lesions may **not require treatment** but may need to be [monitored](#) for any change in the size.
- A change in size of lesions in the [nose](#), [lips](#), or [eyelids](#) can be treated with **steroid drugs** to slow its progress. Steroids can be **taken orally or injected directly into the tumor**.
- **Applying pressure** to the tumor can also be used to minimize swelling at the site of the hemangioma.
- A procedure that uses small particles to close off the blood supply is known as **sclerotherapy**. This allows for tumor shrinkage and less pain.
- If the lesion caused by the cavernous hemangioma is destroying healthy tissue around it or if the patient is experiencing major symptoms, **then surgery can be used**. A common complication of the surgery is [hemorrhage](#) and the loss of blood.
- Treatments for cerebral cavernous Haemangiomas include **radiosurgery or microsurgery**.
- The treatment approach [depends on the site, size and symptoms present, as well as the history of hemorrhage from the lesion](#). **Microsurgery is generally preferred** if the cerebral cavernous hemangioma is superficial in the central nervous system, or the risk of damage to surrounding tissue from irradiation is too high. [A large hemorrhage with deterioration of the patient or intractable symptoms \(such as seizures or coma\)](#) are further indications for microsurgical intervention.
- **Gamma-knife radiation** is the favored mechanism of radiosurgery. It provides a precise radiation dose to the cerebral cavernous hemangioma while relatively sparing the surrounding tissue.
- **Cryotherapy**
- **Chemotherapy**





**Patient treated by surgery**

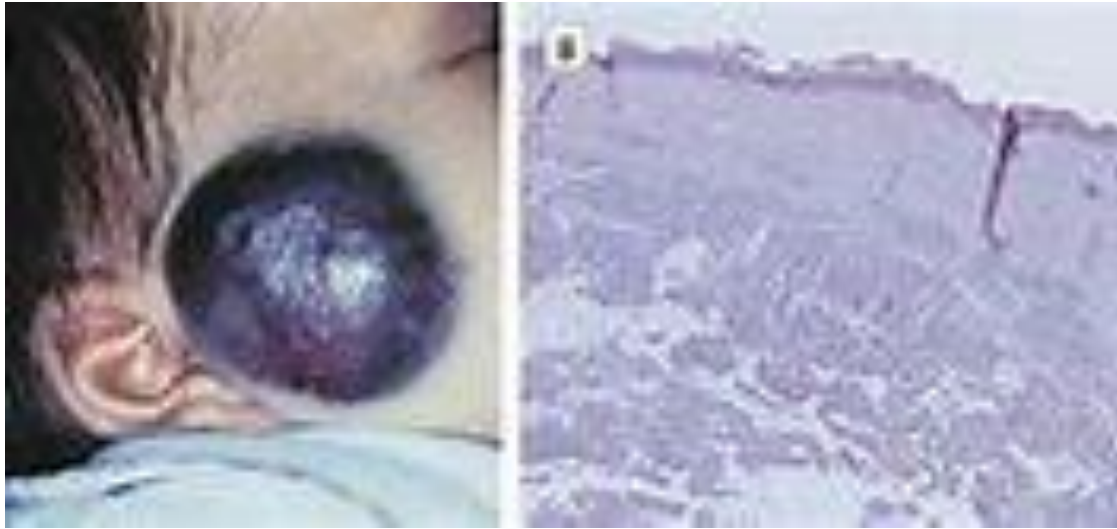
**Patients treated by  
cryotherapy**





# Compound Haemangiomas

Haemangiomas that are flat and appear reddish in color are called “superficial” and those that are deep beneath the skin and appear bluish in color are called “deep” Haemangiomas. **When a hemangioma is both deep and superficial it is called a “compound” hemangioma.** The correct diagnosis is critical for proper treatment.



# References

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