SYMPTOM

Frontal bossing

Frontal bossing is a forehead that appears unusually prominent or rounded.

WHAT IT FEELS LIKE
A painless forehead that looks unusually prominent

WHERE IT IS FELT
Forehead and brow above the eyes

MOST COMMON CAUSES
Familial skull shape, rickets, inherited growth conditions

WHEN IT IS URGENT
Bulging soft spot with vomiting or unusual sleepiness

USUALLY LASTS
Often long-term; timing follows the underlying cause

SEE A DOCTOR IF
New, increasing, uneven prominence or concerns about growth

Overview

Frontal bossing means that the forehead looks more prominent or rounded than expected. The brow area may also project forward. It is a physical feature rather than a disease, and it usually does not cause pain or other sensations.

Forehead shape differs naturally between people and families. A prominent forehead may be a normal inherited feature, especially when it has been present for a long time and there are no concerns about growth or development.

In other cases, frontal bossing develops because of how the skull, bones, or body are growing. It may occur with nutritional problems, hormone conditions, or inherited conditions that affect bone growth. The appearance alone cannot show what the cause is.

A healthcare professional can compare head shape with age, growth measurements, family features, and any other symptoms. This is especially useful in babies and children, whose skulls are still developing.

What it may feel or look like

Frontal bossing usually does not feel different. You may notice it in a mirror or photograph, or a healthcare professional may identify it during an examination.

Possible features include:

Other features depend on the cause. A child might also have an unusually large or small head measurement, delayed growth, bowed legs, dental changes, or differences in the arms and legs. An adult might notice changes in facial features, shoe or ring size, headaches, or vision.

These findings do not point to one diagnosis. They simply help guide an assessment.

- A broad, rounded, or projecting forehead
- A brow ridge that appears more prominent
- Symmetrical prominence across both sides of the forehead
- Uneven prominence, with one side projecting farther
- A forehead shape that becomes more noticeable during growth

Common causes

Normal or familial shape: Some people naturally have a prominent forehead because of their inherited facial and skull shape. Old photographs and the appearance of close relatives can help show whether it is a longstanding family feature.

Nutritional bone changes: Rickets is a condition in which growing bones do not harden normally. It can result from vitamin D, calcium, or phosphate problems. Frontal bossing may occur alongside bone pain, delayed growth, widened wrists, or bowed legs. Supplements should not be started at high doses without medical advice because the correct treatment depends on the specific deficiency or disorder.

Inherited bone-growth conditions: Some genetic conditions affect how cartilage and bones develop. Achondroplasia, for example, can cause a prominent forehead together with shorter arms and legs. Other skeletal conditions have different patterns. Most are assessed using growth history, examination, and sometimes genetic testing.

Changes in skull growth: If skull bones join too early, a condition called craniosynostosis, growth may be redirected toward another part of the skull. This can produce bossing that is central or more obvious on one side. A larger head caused by excess fluid around the brain, called hydrocephalus, can also make an infant's forehead appear prominent.

Less common causes: Long-term severe anaemia can expand the bone marrow inside skull bones. Certain hormone conditions can also change the forehead and facial bones.

Acromegaly, caused by excess growth hormone in adulthood, usually produces gradual changes in several facial features rather than an isolated prominent forehead.

When to seek medical care

Book a routine appointment if frontal bossing is newly noticed, is becoming more obvious, or looks uneven. A baby or child should also be assessed if there are concerns about head growth, height, limb shape, feeding, hearing, vision, movement, or development.

A longstanding forehead shape without other symptoms is usually not an emergency. It can still be discussed during a routine visit, particularly if you are unsure whether it is changing.

Seek urgent medical care if a baby has a soft spot that remains tense or bulging while calm and upright, especially with repeated vomiting, unusual sleepiness, marked irritability, or rapidly increasing head size. These findings can occur when pressure inside the skull is raised.

Call emergency services if the person has a seizure, is difficult to wake, suddenly becomes weak, has severe breathing difficulty, or develops a sudden severe headache with confusion or loss of consciousness.

How the cause is found

The assessment begins with when the forehead shape was first noticed and whether it has changed. In a child, the healthcare professional will review pregnancy and birth history, nutrition, development, and family growth patterns. Previous photographs may be helpful.

The examination may include:

Testing is not always needed. When the examination suggests a nutritional or bone problem, blood tests may measure calcium, phosphate, vitamin D, and other markers of bone health. Other tests may check blood counts, thyroid function, or growth-related hormones.

Ultrasound, X-rays, CT, or MRI may be considered when skull growth, fluid pressure, or bone structure needs closer assessment. Genetic testing may be offered when an inherited growth condition is suspected.

- Measuring head size, height, weight, and limb proportions
- Feeling the skull's soft spots and the lines between skull bones
- Looking for forehead symmetry and other facial features
- Checking the spine, arms, legs, teeth, and walking pattern

- Assessing vision, eye movements, hearing, strength, and development

Treatment and self-care

Frontal bossing itself usually does not need treatment. Care is directed at the cause and at any related problems.

A nutritional deficiency may be treated with appropriate vitamin or mineral replacement. Hormone disorders may need specialist care and medicines or procedures. Skull-growth problems sometimes require monitoring or surgery, while inherited conditions may benefit from coordinated growth, neurological, hearing, or orthopaedic care.

Do not try to reshape the forehead with pressure, massage, tight headwear, or unapproved devices. These methods do not treat abnormal bone growth and may cause harm.

Avoid giving high-dose vitamin D, calcium, or other supplements unless a healthcare professional has identified what is needed. Balanced nutrition and attendance at routine growth checks are sensible while waiting for an assessment.

What to expect

The outlook depends on why the forehead is prominent. A natural family feature may remain stable and need no treatment. Bossing caused by an early growth pattern may become less noticeable as facial proportions change, although it may not disappear completely.

When an underlying condition is found, early care can address nutrition, pressure inside the skull, bone development, or hormone changes. Treatment may improve health without fully changing an established forehead shape.

Children may need periodic measurements as they grow. Follow-up is usually routine unless head size changes quickly or neurological symptoms develop. Your healthcare professional can explain what changes to monitor and how often measurements are needed.

Common questions

Is frontal bossing painful?

Usually not. Pain, tenderness, swelling, or redness suggests another issue and should be assessed separately.

Does a prominent forehead always mean there is a medical condition?

No. Forehead shape can be a normal family trait. The pattern of growth and the presence of other features matter more than appearance alone.

Can frontal bossing develop in adults?

Yes, although a new change in adulthood is less likely to reflect normal skull growth. Gradual enlargement of the brow, jaw, hands, or feet should be discussed with a healthcare professional.

Will it go away?

That depends on the cause and age at which it appears. Some prominence becomes less noticeable as facial proportions change. Established bone shape may remain even after the underlying condition is treated.

Can a helmet correct it?

Helmets are used for selected skull-shape problems in infants, but they are not a general treatment for frontal bossing. A specialist assessment is needed before any shaping device is considered.

Sources

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