SYMPTOM

Fontanelles - bulging

A bulging fontanelle is a baby's soft spot that appears raised or feels unusually tense.

WHAT IT FEELS LIKE
My baby's soft spot looks raised or feels tense

WHERE IT IS FELT
Soft areas between your baby's skull bones

MOST COMMON CAUSES
Crying, lying flat, vomiting

WHEN IT IS URGENT
Bulging persists while calm and upright, especially with fever

USUALLY LASTS
Minutes if temporary; longer according to the underlying cause

SEE A DOCTOR IF
The soft spot concerns you, but no urgent signs are present

Overview

Fontanelles are the soft spaces between the bones of a baby's skull. The largest is usually near the top and front of the head. These spaces allow the skull to grow as the brain develops, and they gradually close during infancy or early childhood.

A fontanelle may briefly look fuller when a baby cries, vomits, coughs, or lies flat. It should usually return to its normal appearance when the baby is calm and held upright.

A fontanelle that remains raised or feels tense while a baby is calm and upright is different. It can happen when pressure inside the skull has increased. Infection, fluid buildup, bleeding, or swelling can cause this pressure. A persistent bulge needs prompt medical assessment, particularly when there is fever or a change in the baby's behaviour.

What it may feel or look like

A normal fontanelle usually feels soft and flat, or very slightly dipped. You may see it move gently with your baby's heartbeat. This can be normal.

A bulging fontanelle may:

Do not press firmly on the area to test it. Gentle washing, touching, or brushing will not usually harm the fontanelle because it is covered by strong tissue.

The position and mood of your baby matter. Try looking again after your baby has stopped crying and has been upright for a few minutes. If the fontanelle remains raised, seek medical advice promptly.

- Look raised above the surrounding skull
- Feel firm or tense rather than soft
- Remain raised while your baby is calm and upright
- Occur with fever, vomiting, unusual sleepiness, or irritability

Common causes

The most common reasons for a fontanelle to look temporarily full are crying, vomiting, coughing, straining, or lying flat. These actions briefly increase pressure in the head. The soft spot should flatten again once the baby is settled and upright.

A persistent bulge is less common and may have several causes. It does not point to one diagnosis.

Possible causes include:

A fever alone does not explain away a persistent bulge. Fever together with a bulging fontanelle can be a sign of a serious infection and needs urgent assessment.

- Meningitis or encephalitis: Infection or inflammation around the brain
- Hydrocephalus: An abnormal buildup of fluid in spaces within the brain
- Head injury or bleeding: Bleeding inside the skull may increase pressure
- Brain swelling: This can follow serious infection, injury, or another illness
- A mass or structural problem: An uncommon cause that may block fluid flow

When to seek medical care

Arrange same-day urgent medical assessment if the fontanelle stays bulging while your baby is calm and upright. This is especially important if there is fever, repeated vomiting, poor feeding, unusual irritability, or your baby seems less alert than normal.

A baby younger than 3 months with a temperature of 38°C or higher needs urgent medical

assessment, whether or not the fontanelle is bulging.

Call emergency services or go to an emergency department now if your baby:

If the fontanelle only becomes full during crying or while lying down, then returns to normal when your baby settles, an emergency assessment may not be needed. Book a routine appointment if it keeps happening, the shape of the head is changing, or you are unsure what you are seeing.

- Is difficult to wake, unusually floppy, or not responding normally
- Has a seizure
- Has trouble breathing or develops blue, grey, or very pale skin
- Has a stiff body or neck with fever
- Develops a red or purple rash that does not fade under pressure
- Has a bulging fontanelle after a significant head injury
- Has sudden weakness, unusual eye movements, or repeated forceful vomiting

How the cause is found

A clinician will ask when the bulging started and whether it changes with crying or position. They will also ask about fever, feeding, vomiting, sleepiness, injury, recent illness, and changes in behaviour.

Your baby's temperature, alertness, head size, eyes, movement, and reflexes may be checked. The fontanelle will be examined gently while your baby is as calm as possible.

Tests are not always required for a temporary bulge with a clear explanation. When a persistent bulge or illness is present, tests may include blood and urine tests.

An ultrasound can sometimes create images through the open fontanelle. CT or MRI scans may be used to look for fluid, swelling, bleeding, or structural changes. If meningitis is suspected, a lumbar puncture may be considered. This test collects a small sample of the fluid surrounding the brain and spinal cord.

Treatment and self-care

Treatment depends on what is causing the bulge. A persistent bulging fontanelle is not treated as a separate condition.

A bacterial infection may require hospital care and antibiotics like amoxicillin or doxycycline .

Fluid buildup, bleeding, or increased pressure inside the skull may need specialist treatment. The medical team will explain which tests and treatments are appropriate for your baby.

While checking a possible temporary bulge:

Do not delay urgent assessment to see whether medicine lowers a fever or changes the fontanelle. Do not give a baby medication unless it is suitable for their age and you have clear instructions on how to use it.

- Calm your baby and hold them upright
- Look again after crying or vomiting has stopped
- Continue normal feeds if your baby can feed comfortably
- Avoid repeatedly pressing or rubbing the fontanelle

What to expect

A soft spot that briefly becomes full during crying, straining, vomiting, or lying flat should settle within minutes once the pressure passes.

The course of a persistent bulge depends on its cause. Some infections improve with prompt treatment. Fluid buildup or bleeding may require monitoring, procedures, or ongoing specialist care.

After assessment, follow the return instructions you are given. Seek help again if the bulge returns, fever develops, feeding worsens, vomiting continues, or your baby becomes sleepier or harder to comfort.

Common questions

Is a pulsing fontanelle normal?

A gentle pulse can be normal because blood vessels lie beneath the soft spot. A pulse is different from a fontanelle that stays raised and tense.

Can crying make the soft spot bulge?

Yes. Crying can briefly make it look fuller. It should return to normal after your baby settles and is held upright.

Does a sunken fontanelle mean the same thing?

No. A noticeably sunken fontanelle can be associated with dehydration, especially with fewer wet nappies, a dry mouth, or poor feeding. It needs separate assessment.

Can I touch or wash the fontanelle?

Yes. Normal gentle touching, washing, and brushing are safe. The area is protected by a strong layer of tissue.

Should I wait until morning?

Do not wait if the fontanelle remains bulging while your baby is calm and upright, particularly with fever or abnormal behaviour. Arrange urgent assessment.

Sources

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