SYMPTOM

Fontanelles - sunken

A sunken fontanelle is a baby's soft spot that appears lower than the surrounding skull.

WHAT IT FEELS LIKE
A soft spot that looks lower than nearby skull bones

WHERE IT IS FELT
Top or back of a baby's head

MOST COMMON CAUSES
Fluid loss from vomiting or diarrhoea, feeding difficulties

WHEN IT IS URGENT
Sunken spot with fewer wet nappies, poor feeding, or drowsiness

USUALLY LASTS
Until fluid balance or the underlying cause improves

SEE A DOCTOR IF
It stays sunken despite normal feeding, urination, and behaviour

Overview

Fontanelles are the soft spaces between the bones of a baby's skull. The larger one is usually near the top and front of the head. A smaller one may be felt toward the back. They allow the skull to grow as the brain develops and gradually close during infancy or early childhood.

A fontanelle normally feels firm and may curve slightly inward. Its appearance can change with the baby's position, lighting, crying, or movement. A clearly sunken fontanelle can be a sign that a baby has lost too much body fluid, especially when there are other signs of dehydration.

Dehydration means the body does not have enough water and salts to work normally. A sunken fontanelle alone cannot show how dehydrated a baby is or identify the cause. Feeding, wet nappies, alertness, mouth moisture, and recent illness all provide important information.

What it may feel or look like

The soft spot may look lower than the surrounding skull bones or feel more dipped than usual. It is often easiest to assess when the baby is calm and held upright or partly upright.

A slight inward curve can be normal. Hair, shadows, head position, and the natural shape of the

skull can also make the area appear deeper. What matters is whether the fontanelle looks noticeably different from usual and whether the baby has other symptoms.

It is safe to touch the fontanelle gently. A strong layer of tissue protects the area, but avoid repeatedly pressing on it.

Common causes

Common causes

Fluid loss is the main concern. Babies can lose fluid through vomiting, diarrhoea, fever, or heavy sweating. They may also become dehydrated if they are feeding less because of illness, a blocked nose, mouth discomfort, or difficulty attaching to the breast or bottle.

Incorrectly prepared formula can affect fluid and salt balance. Formula should be mixed exactly as directed rather than diluted or concentrated.

Less common causes

Poor weight gain or inadequate nutrition may sometimes be linked with a persistently sunken fontanelle. Certain kidney, hormone, or digestive conditions can also cause unusual fluid loss, although these are less common than short-term feeding problems or stomach infections.

A fontanelle that only appears mildly indented, with normal feeding, wet nappies, growth, and behaviour, may reflect normal anatomy rather than illness.

Potentially urgent causes

Severe dehydration can develop when fluid losses continue or a baby cannot keep feeds down. Young babies can become unwell more quickly than older children, so a sunken fontanelle together with reduced urination, poor feeding, or unusual sleepiness needs prompt assessment.

When to seek medical care

Arrange same-day medical advice if the fontanelle is clearly sunken and your baby has one or more of these signs:

Call emergency services if your baby is very difficult to wake, becomes limp or unresponsive, has a seizure, struggles to breathe, or develops blue, grey, or markedly mottled skin.

A routine appointment is appropriate if the fontanelle continues to look sunken despite normal feeding, wet nappies, and behaviour. Also book an appointment if you have concerns about feeding, growth, or weight gain.

- Much fewer wet nappies than usual
- A dry or sticky mouth, or few tears when crying
- Repeated vomiting or frequent watery diarrhoea
- Refusing feeds or being unable to keep feeds down
- Unusual sleepiness, weakness, or persistent irritability
- Eyes that also appear sunken
- Fever in a baby younger than 3 months

How the cause is found

A healthcare professional will ask about when the change began, recent vomiting or diarrhoea, fever, feeding amounts, and the number of wet nappies. They may also ask how formula is prepared and whether your baby has been unusually sleepy or irritable.

The examination may include checking the fontanelle, mouth, eyes, skin, heart rate, breathing, weight, and alertness. These findings help estimate whether dehydration is present and how serious it may be.

Tests are not always needed when dehydration is mild and the cause is clear. Blood or urine tests may be considered if the baby appears significantly unwell, has ongoing symptoms, or may have another condition affecting fluid balance.

Treatment and self-care

Treatment depends on the amount of fluid lost and why it happened. Continue breastfeeding unless a healthcare professional advises otherwise. Formula-fed babies should usually continue their usual correctly mixed formula.

For vomiting or diarrhoea, a clinician may recommend an oral rehydration solution. This is a prepared mixture of water, sugar, and salts designed to replace lost fluid. Follow the product instructions and professional advice, particularly for a young baby.

Do not dilute formula, make homemade rehydration mixtures, or give anti-diarrhoea medicine unless a qualified professional has advised it. Plain water, juice, and fizzy drinks are not suitable substitutes for breast milk, formula, or an appropriate rehydration solution in young babies.

A baby who cannot drink enough or has more serious dehydration may need hospital treatment, sometimes including fluid through a vein.

What to expect

When dehydration is the cause, the fontanelle should become less sunken as fluid balance improves. Alertness, feeding, mouth moisture, and wet nappies are often more useful signs of recovery than the soft spot alone.

Vomiting or diarrhoea may continue for a time even after drinking improves, so keep watching for renewed signs of fluid loss. Seek further advice if your baby is not improving, becomes less responsive, or begins taking less fluid.

Fontanelles naturally become smaller and close as the skull grows. Once a fontanelle has closed, it can no longer be used as a visible clue to hydration.

Common questions

Does a sunken fontanelle always mean dehydration?

No. A mild dip may be normal, especially when a baby is upright. Dehydration is more likely when the change is new and occurs with fewer wet nappies, dry mouth, poor feeding, vomiting, diarrhoea, or reduced alertness.

Can I check the fontanelle at home?

You can look at it in good light when your baby is calm. Compare it with how it usually looks, but do not rely on the fontanelle alone. Feeding, urination, and behaviour are also important.

Is touching the soft spot dangerous?

Gentle touching, washing, or brushing over the area is safe. Protective tissue covers the brain beneath it.

Can teething cause a sunken fontanelle?

Teething itself does not usually cause dehydration. If a baby is drinking less or has vomiting, diarrhoea, or fever, another illness may be responsible and should be considered.

Sources

- MedlinePlus Medical Encyclopedia: Fontanelles - sunken , U.S. National Library of Medicine
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- NICE guideline CG84: Diarrhoea and vomiting caused by gastroenteritis in under 5s , National Institute for Health and Care Excellence
- NHS: Dehydration , National Health Service
- MSD Manual Consumer Version: Dehydration in Children , Merck & Co., Inc.