What can I do to help my baby?

The good news is that most babies don't need any treatment at all for plagiocephaly. Your child's brain will continue to grow rapidly during the first two years of life, and as it grows it will naturally push the skull to become rounder. The plagiocephaly will likely resolve on its own as the brain grows.

As babies develop their motor skills, they also become better able to support and move their head, making them less likely to stay in one position too long. This will also allow the plagiocephaly to resolve without intervention.

To help encourage these natural processes, a parent can take a few simple steps:

- Supervised "tummy time" and spending time in a bouncy seat gets babies off their backs and helps develop the muscles and motor control needed to hold the head up.
- Placing your baby's head on the non-flattened side-at bedtime, during feeding, and while in the stroller or car seat—can help prevent further flattening and encourage the natural development that will resolve the condition.
- Use toys, mobiles, and other attention-getters to encourage your baby to turn his or head in the desired direction.
- If your child has severe torticollis and cannot be easily repositioned, physical therapy may help.
- Speak to your pediatrician or specialist about other treatment options, such as orthotic helmeting.

Weill Cornell Medicine offers a comprehensive plagiocephaly clinic. This clinic, run by our advanced provider team, provides comprehensive evaluation, management, and treatment for children with positional plagiocephaly. To make an appointment, please call 212-746-2363.



Neurological Surgery

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For more information, please contact the program coordinator at 212-746-1274 or visit us at neurosurgery.weillcornell.org/craniofacial

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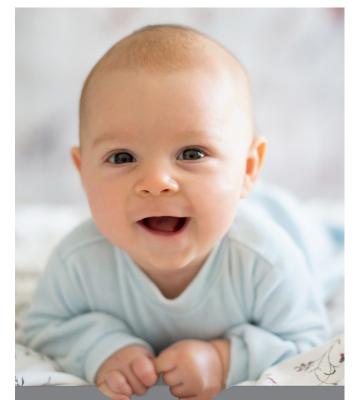
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Weill Cornell Medicine Neurological Surgery



A Parent's Guide to Plagiocephaly

From the Weill Cornell Medicine **Craniofacial Program**

neurosurgery.weillcornell.org

What is plagiocephaly?

Plagiocephaly, also called positional molding or deformational plagiocephaly, is a very common condition in which one or more areas of a baby's head become flattened. Babies with plagiocephaly typically also appear to have sloping or bulging foreheads, and their ears may appear to be tilted. Plagiocephaly is not dangerous, does not affect brain development or function, and usually does not require treatment.



Left: The normal, symmetrical head shape of an infant. Right: The head shape of an infant with plagiocephaly, with a flattening on the right side of the skull.

What is brachycephaly?

Plagiocephaly is most commonly characterized by flatness on one side of the head. Flattening on both sides of the head is called brachycephaly, which results in the back of the head being completely flat.

Plagiocephaly, brachycephaly, and combination

Plagiocephaly and brachycephaly may occur separately or together. The mixture of both types often occurs when plagiocephaly is resolving.



Left to right: The head shapes of an infant with plagiocephaly (flattened on one side), brachycephaly (flattened on both sides, which flattens the back of the head), and a combination of plagiocephaly and brachycephaly.

What causes plagiocephaly?

Infant skulls are malleable, which make them easily affected by pressure. Plagiocephaly most commonly occurs when a baby spends a lot of time in one position—in fact, since the American Academy of Pediatrics introduced its "Back to Sleep" campaign to reduce the risk of Sudden Infant Death Syndrome (SIDS), the incidence of plagiocephaly has risen from 1 in 300 infants to 1 in 10. The more time a baby spends on his or her back, the more likely it is for the back of the skull to flatten.

Other causes of plagiocephaly include:

Torticollis: Some infants have tight neck muscles, so they feel more comfortable with their head turned to one side. Favoring that side can eventually cause the skull to flatten there. Torticollis is one of the most common causes of plagiocephaly, and it can be treated with physical therapy and stretching.

Womb Position: The way your baby was positioned during pregnancy may cause plagiocephaly, especially if there was limited intrauterine space.

Multiple Births: Having to share the womb gives multiples less space during pregnancy, which can lead to plagiocephaly. It is also is harder for parents of multiples to keep track of turning and positioning their babies to keep them from favoring one side!

Prematurity: Premature babies are born with thinner skulls, making them more susceptible to developing plagiocephaly.

Prolonged NICU Stay: Babies who spend extended time in the NICU are at risk for plagiocephaly due to therapies that may require them to lay flat or favor one side.

Carriers/Convenience Devices: Babies who spend lots of time in carriers, car seats, swings, and other devices are at increased risk of plagiocephaly.

For more information, visit neurosurgery.weillcornell.org/craniofacial or call 212-746-1274

Is it plagiocephaly or something else?

A flattened head is almost always a harmless case of plagiocephaly. Since there are other conditions that may affect a baby's head shape, however, it's important that your baby be correctly diagnosed.

An expert in craniofacial anomalies can easily diagnose plagiocephaly with a simple physical exam. Imaging studies—such as X-rays, CT scans, or MRI scans—are seldom needed.

Signs of plagiocephaly

The clinician who examines your baby will be looking for five primary signs of plagiocephaly:

- The back of the head is flat on one side.
- The baby's overall head shape resembles a parallelogram.
- The baby's forehead is more prominent on the affected side.
- One ear is shifted more forward than the other.
- The baby's face is unaffected.

Signs of brachycephaly

There are three primary signs of brachycephaly:

- The baby's head is wider than its length.
- The back of the baby's head is flat in appearance, versus curved.
- The baby's face is unaffected.

What else to look for

A child with plagiocephaly or brachycephaly may also have a slight bulging of the forehead. The red outline in the diagram at right shows how an infant with plagiocephaly might

with plagiocephaly might look from the side, with a slight bulge at the forehead and noticeable flattening at the back of the head.

An expert in craniofacial disorders can accurately diagnose plagiocephaly or brachycephaly, but no treatment is usually required. As the brain continues its rapid growth, the skull will naturally expand and round out to the normal silhouette (shown in the brown outline).

