Treating Plagiocephaly

If you are concerned about your baby's head shape, your physician can help you determine an appropriate plan for your child. In the event your baby's head shape hasn't improved through repositioning techniques, treatment through the DOC Experience[®] has shown to be effective.

- Plagiocephaly is treatable up to 18 months old
- The ideal treatment window is between 4–6 months old
- Early detection is key for optimal results
- Although repositioning can be effective, severe plagiocephaly, especially from position in the womb, will not round out by itself

Put Your Mind at Ease

Scheduling a free evaluation with one of Cranial Technologies skilled clinicians will determine if your baby has plagiocephaly. The evaluation includes:

- Comprehensive head shape & developmental assessment conducted by our clinicians
- Instantaneous capture of a 360° image of your infant's head with our Digital Surface Imaging® (DSi®) system
- Objective and accurate DSi Analysis[™] report that shows the severity of your infant's head shape
- Neck exercises and repositioning techniques for torticollis instructed by our clinicians, if needed
- Assistance from Cranial Technologies team of Patient Liaisons to help you determine your insurance coverage and discuss our convenient payment options

The DOC Experience®

When it comes to your baby, we understand you want the best care and a positive treatment experience. As the plagiocephaly treatment leader, we provide the most comprehensive offering for plagiocephaly treatment through the DOC Experience which is centered around the best care and happy families.

- Nearly 35 years of exceptional results
- Approximately 175,000 infants treated with demonstrated outcomes
- Changes visible within a few weeks
- 3D digital images for each patient used to document progress
- Only product proven to correct both the cranial vault (upper head) and skull base (ear and face) deformities
- Clinicians are PTs, OTs, Orthotists and RNs
- We are dedicated solely to the treatment of plagiocephaly it's all we do!

(844) 447-5894 cranialtech.com CRANIA

INS-014 Rev 05 ECO 18-078 Effective Date: 8/8/18

What Is Plagiocephaly?

Your Baby's Head Shape



Understanding Plagiocephaly

Are you or your physician concerned about your baby's head shape? Plagiocephaly, or a misshapen head, is a common condition. In fact, since the American Academy of Pediatrics (AAP) introduced the "Back to Sleep" Campaign, the incidence of plagiocephaly has risen from 1 in 300 infants to almost 1 in 10 infants.

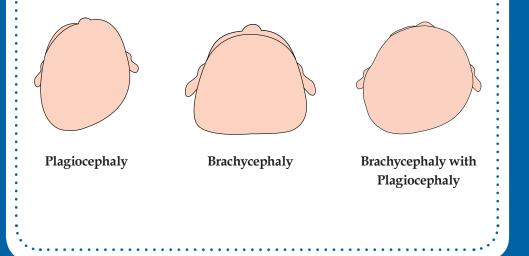
This brochure gives in-depth information regarding common forms of plagiocephaly, their causes and specific characteristics associated with each head shape.



What is Plagiocephaly?

Plagiocephaly occurs when there are one or more areas of flatness on the baby's head. Typically, it is also accompanied by a combination of facial asymmetry, ear shifting and forehead sloping or bulging.

Here are the three main forms of plagiocephaly:



What Causes Plagiocephaly?

Since an infant's skull is so soft and malleable, there are many factors that can contribute to plagiocephaly.

- **Position in the Womb:** Your baby's position during your pregnancy may impact the head shape, especially in cases of multiple births or restricted space.
- **Torticollis:** Tight neck muscles can contribute to your baby's preference to turn to the right or left side. This condition is common in many infants with plagiocephaly and can be treated with physical therapy and neck exercises.
- **Prematurity:** Premature babies have a much higher risk of developing plagiocephaly due to the thinness of their skulls. Additionally, babies who begin their lives in the NICU can develop a long, narrow head shape as a result of being rotated from one side to the other.
- **Back Sleeping:** In 1992, the American Academy of Pediatrics (AAP) began recommending all babies sleep on their backs in an effort to reduce SIDS. Since that recommendation, the incidence of SIDS deaths has decreased by 50 percent. Research also shows that the average 2-month-old baby now spends 15-16 hours a day on their back, which may increase flattening. Additionally, the AAP advises that babies receive supervised tummy time with an adult during play time each day to reduce the amount of time on their backs.
- **Convenience Devices:** Research indicates babies spend an increased amount of time on their backs in car seats, bouncy seats and swings, which contribute to head flattening.



What Does Plagiocephaly Look Like?

This section is designed to guide you through the main forms of plagiocephaly, their varying degrees of severity and their characteristics. Although plagiocephaly does occur frequently, educating yourself and those around you is important for prevention and early detection.

Talk to your physician for more in-depth information about plagiocephaly, prevention tips and any concerns you have about your baby's head shape.

Plagiocephaly



Normal Head Shape



Mild Plagiocephaly



Moderate

Plagiocephaly



Severe Plagiocephaly

Characteristics of Plagiocephaly

side of the head



- Head is flat on one side
- Overall head shape resembles a parallelogram • One ear is shifted in
- front of the other



 Ear is closer to the shoulder on one

fuller than

• Top of head is

the other

not level

• Forehead is angled

- One eve is smaller than the other • One cheek is
 - and not level • Face has a slope and seems to be slanted
 - Eyes and ears are not level
- One side of the • One cheek and side head looks taller of the face appear fuller than the other than the other

Plagiocephaly: This is the most commonly-referenced head shape. When you look down on the head shape from a bird's-eye-view, you will see a parallelogram shape. From this angle, it also looks as if half of the head has been pushed forward, often accompanied by misalignment of the ears, facial asymmetry, bulging forehead and one cheek appearing "fuller" than the other. It's also not uncommon for torticollis to be a contributing factor to plagiocephaly.

Brachycephaly



Normal Head Shape



Mild Brachycephaly





Severe Brachycephaly

Characteristics of Brachycephaly



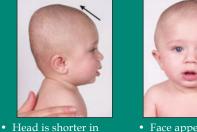
Head is wider than its length
Back of head is

- Back of head is flat in appearance instead of curved
 - is tall) • Forehead slopes back

to back

length from front

• Head height (head



- Face appears small for the size of the head
- Bump above the earsEars poke out

at top

- Head is wide
 Bump above ears is the widest point of the head

Brachycephaly: Something as simple as spending too much time on the back can cause brachycephaly. With this shape, the head flattens uniformly, causing a wider and shorter shape, including increased head height. Other common traits of brachycephaly include an extreme forehead incline, bumps or bulging above the ears and the face appearing "small" in proportion to the head.

Plagiocephaly Prevention

Now that you are familiar with plagiocephaly, it's important to be aware of the preventative measures that can help reduce your child's chances of developing positional plagiocephaly, in addition to helping your little one meet their developmental milestones.

Tummy Time: This is a very important activity for all infants, although they might not enjoy it at first. By encouraging your baby to spend time on their tummy during supervised play time, it not only decreases the amount of time spent on their back, but also helps develop strong neck and trunk muscles.

Repositioning: If you do start noticing your little one favors turning their head to a particular side, encourage them to increase their range-of-motion. For example, alternate which arm you use to hold them, which side of the crib they sleep at and which end of the changing table you typically use.

