

UNDERSTANDING POSITIONAL PLAGIOCEPHALY

WHAT IS POSITIONAL PLAGIOCEPHALY?

During an infant's first four to six months of life, the skull is naturally thin and flexible. It can easily change shape. When an infant at this stage regularly sleeps with his or her head in the same position, it may lead to a flattening of part of the skull.

The "back to sleep" rule followed by parents observing American Academy of Pediatrics recommendations for reducing the risk of Sudden Infant Death Syndrome (SIDS) may occasionally lead to flattening of the back of a child's skull.

Over time, most children's heads will round out as they

3 TYPES OF HEADSHAPES ASSOCIATED WITH POSITIONAL DEFORMITY



Plagiocephaly



Brachycephaly



Scaphocephaly

spend more time in other sleeping positions and upright.

A few infants may continue resting their heads on one side while lying on their backs. Some of these babies, particularly those with shortened neck muscles, a condition called torticollis, may develop a more serious kind of skull flattening. In this scenario the side of

the back of the head flattens, sometimes leading to one side of the head shifting forward. From above, the infant's head looks like a "parallelogram." This condition is called positional plagiocephaly. It occurs about once in every 300 live births.

NORMAL BRAIN DEVELOPMENT

Positional plagiocephaly does **not** affect brain growth or development. By age 4 to 6 nearly all such children have developed normally shaped heads.

But early recognition of the problem is important. Regular repositioning of the baby off the flattened side of the skull prevents development of severe positional plagiocephaly and can speed up the rounding process, helping the baby's head to round out by age 1. Surgery is almost never needed.

PREVENTION & CORRECTION

Try to keep your baby from putting pressure on the flat part of his or her head—especially when sleeping. Vary the position of your child's head so different spots take the weight.

- Try hanging a mobile, crib toy, or light on the side of the crib you want your baby to face. You might also try propping your baby to the desired side with rolled-up blankets, towels or foam wedges.
- If your child has torticollis, your doctor may recommend stretching exercises to loosen your child's neck muscles and encourage greater range of motion.
- Increase your baby's daily "tummy time." This helps your baby get used to the belly sleeping position, when he or she rolls over.
- Reduce your baby's time in car seats, swings or baby carriers and increase sitting time. A sitting baby takes pressure off the back of the head and allows your baby to look around, giving neck muscles a good work out.
- You might also try a special car seat insert, which helps keep your baby's head from lying flat.

HELMETS

If the neurosurgeon decides your child's plagiocephaly is severe and persistent, a helmet may be recommended. The helmet keeps pressure off the flat spot, allowing the baby to sleep in any position. Helmet therapy is typically begun by 9 months of age.

The helmet is custom fitted and made especially for your child. It is worn 23 hours a day, for about three to four months. It has a plastic shell lined with multiple layers of polyethylene foam, which can be removed one at a time to allow the helmet to grow as your child's head grows.

Helmets are painless and don't interfere with normal brain growth and development.

Helmet therapy does help the skull-rounding process but doesn't guarantee a perfect head shape. Plagiocephaly that exists after helmet therapy naturally fades away as the baby's skull continues to grow.



ONLINE RESOURCES

<http://pediatricneurosurgery.org/diagnosis/positional-plagiocephaly>

www.babycenter.com/refcap/1187981.html

www.kidshealth.org/parent/growth/sleep/positional_plagiocephaly.html

