UNIVERSITY OF FLORIDA
PEDIATRIC NEUROSURGERY
AND CRANIOFACIAL
PLASTIC SURGERY

Guide to Understanding
Positional Plagiocephaly

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What is positional plagiocephaly?
When babies are born, their skulls are soft, which helps them pass through the birth canal. It can take 9 to 18 months before a baby's skull is fully formed. During this time, some babies develop positional plagiocephaly. This means that there is a flat area on the back or side of their head.

What causes positional plagiocephaly?
A flat area on the back or side of the head is commonly caused by repeated pressure to the same area. This usually happens when a child prefers to lay on his or her head on the same spot, causing the head to be misshapen. Other causes include:

- Baby's position in the womb that puts pressure on the head
- More than one baby in the same pregnancy
- Spending too much time laying on his or her back
- Torticollis (a tight muscle on one side of the neck), which can cause the head to tilt one way or make it hard to turn the head

Please remember that parents should always put their baby to sleep alone, on his or her back, and in a crib. These are some of the best ways to prevent sudden infant death syndrome, or SIDS.

What should you do if you are concerned about your baby's head shape?
During well visits, your child's primary care doctor will check your baby's head shape. The doctor will watch your baby to see whether the shape of his or her head improves over time or if treatment is needed.

If you have specific concerns, please speak with your child's primary care doctor.

How is positional plagiocephaly treated?
In many children, the flattening is corrected as the child becomes more mobile and lies less on the affected area. Other techniques include:

- When your child is on his or her back, gently turn the head to the side that is not flat. This is the “non-preferred side.” Changing sides takes pressure off the flat spot. Do not use anything to hold the head in place.
- Place a toy or Velcro® a wrist rattle to your child's left or right hand to encourage him or her to look toward the non-preferred side and take pressure off the flat side. You can also hold toys at the non-preferred side to encourage looking in that direction.
- When awake, limit the time your baby spends in swings or baby carriers. If your child is able to sit up, it will take the pressure off the back of the head and build neck strength.
- For infants who cannot sit for long periods, increase the amount of supervised tummy time when the child is awake.
- When you hold your baby, make sure there is no pressure on the flattened side of the head.

In some cases, these methods will not help the head to round out. In these instances, your child's primary care doctor will discuss with you the pros and cons of using physical therapy and/or a custom-made helmet or band to redirect growth.

Will my child need to see a specialist?
In rare cases, when other treatments are not effective, the primary care doctor may recommend a consultation with a specialist.