

Positional Plagiocephaly

**Information for parents from the
Pediatric Neurosurgery Team**

What is positional plagiocephaly?

Positional plagiocephaly is a flattening at the back of a baby's skull that may develop in the first few months of age.

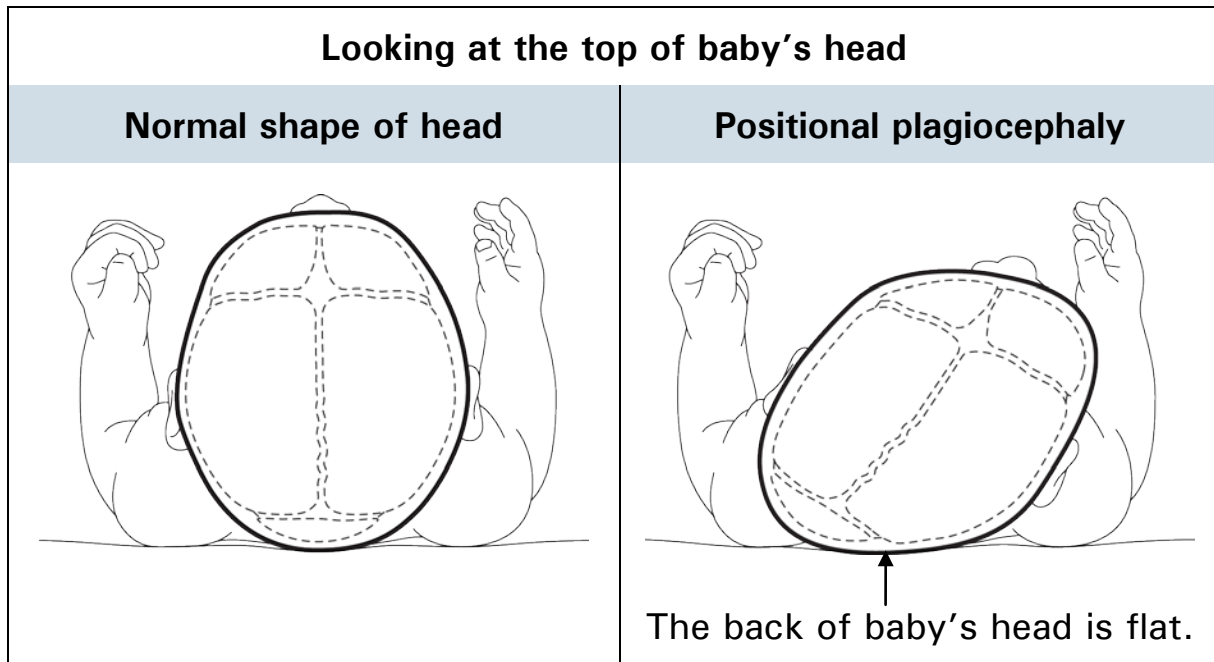
The bones of a newborn baby's skull are soft and flexible, with gaps between them. This allows room for the brain to grow. When the brain is fully grown, the gaps close and the bones harden.

While the bones are flexible, they can be shaped by the baby's position and activity. If the baby spends a lot of time on his or her back, the back of the head can become moulded into a flat shape.

**Positional plagiocephaly is simply a change in the
shape of the head.**

It does not affect brain development.

The extent of the flattening varies. The whole back of the head may become flattened. This is called brachycephaly. Flattening can also affect the front of the head or make the ears look uneven.



What causes positional plagiocephaly?

The most common cause is the length of time babies spend on their backs. Babies must sleep on their backs and if they also spend much of their awake time in this position, the back of their heads can become flattened.

Some babies have limited neck movement and tend to only turn their head to one side. This condition is called torticollis. If babies do not move their head to both sides, their heads can become flattened.

How can parents and caregivers help?

Continue to always put your baby on his or her back to sleep, both at nap time and at bedtime. This has proven to be the safest position for sleep.

When your baby is awake, he or she should spend as little time as possible lying on his or her back.

Change your baby's position often while he or she is awake.

Some recommendations include:

- Spend 'tummy time' with your baby when he or she is awake.



For more information, read our "[Tummy time](http://www.hamiltonhealthsciences.ca)" handout at www.hamiltonhealthsciences.ca

- Limit the time spent in car seats to travel time only.
- Limit time spent in swings, strollers and bouncy chairs.
- Encourage your child to turn his or her head to the desired side. Place something interesting for your baby to see on the desired side or change the position of the car seat or crib.

At around 6 months of age babies begin to sit up on their own, which helps with reshaping the head.

After 12 months of age, repositioning is no longer helpful, but the head shape will continue to improve with normal growth and development.

How can positional plagiocephaly be treated?

Your child's health care providers will assess your child's head as he or she grows and may recommend treatment.

Some children benefit from wearing a helmet (called a plagiocephaly orthosis) for a few months to remould their head.

Children with torticollis will need assessment and treatment by a Physiotherapist for exercises, positioning suggestions and developmental activities.

If you have questions, please talk with a member of your child's health care team.