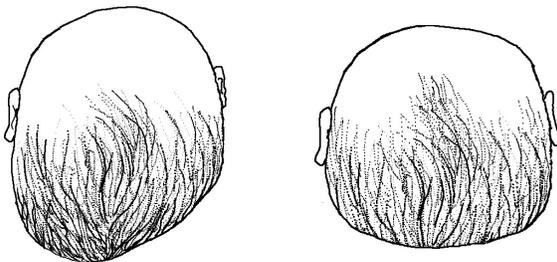


Plagiocephaly

What is plagiocephaly?

The word plagiocephaly (“play-jee-oh-seff-ah-lee”) means “oblique head.” One side or the back of the head is flattened.

Different head shapes (viewed from top of head)



What causes it?

At birth, an infant’s skull is made up of several bones connected by sutures (joints). The sutures help the head pass through the birth canal, and also allow room for the brain to grow. After birth, the quickly growing brain continues to shape the bones of the skull.

Pressures from the outside can also shape the skull. Plagiocephaly is usually positional. It develops when an infant sleeps or rests on one part of the head most of the time. It has become more common because parents are now advised to place infants on their backs for sleep to help prevent sudden infant death syndrome (SIDS). Extended use of car seat carriers, swings, and bouncers also place infants on their backs for long periods of time and may change head shape.

Sometimes plagiocephaly results from torticollis, a condition that shortens or tightens the neck muscles, making head-turning difficult. All babies with plagiocephaly should be checked for torticollis. It is **very important** to treat torticollis with physical therapy, as it can cause long-term problems. (See the education sheet, “Torticollis.”)

Rarely, plagiocephaly occurs when one or more of the sutures closes too early. This is usually treated with surgery. (See the education sheet, “Craniosynostosis.”)

How is it diagnosed?

By examining your child and asking you questions, the doctor can often make the diagnosis. An X-ray or CT scan of the head may also be needed.

Why is it a problem?

Flatness on one part of the skull often affects other areas of the face or head. Ears may be misaligned, parts of the face may bulge, or features of the face may be unequal.

How should I care for my baby?

Treatment depends on age and the degree of plagiocephaly.

Younger than 5 to 6 months: At this age, a baby placed in a certain position will generally stay there. Frequent “repositioning” to prevent pressure on the flat side can help gradually correct the head shape. See “How should I position my baby?” on page 2.

Older than 5 to 6 months: At this age, many babies can roll and move more independently, so repositioning can be a challenge. Other options at this stage include helmet therapy (see page 3) or, in rare cases, surgery.

An infant of any age with torticollis should have physical therapy and home exercises to help bring the neck muscles into balance.

How should I reposition my baby?

While it takes a lot of time, care, and attention, repositioning can help greatly to correct your baby's head shape. Your goal is to avoid pressure to the flat side of the head, and apply gentle pressure to the rounded side. Follow the guidelines below.

Sleeping

Keep placing your baby on her back for sleep. This is proven to prevent SIDS. Babies should sleep on a firm mattress covered by a fitted sheet. Keep loose bedding and soft toys out of the crib.

- Position baby in the crib so that her head is rounded-side down to allow a view into the room.
- Hang crib toys or mirrors on that side of the crib to keep your baby looking that way.

Some products claim to be designed to keep a baby in one position. These products have not been tested for safety and are **not** recommended.

Feeding

When feeding, position your baby so that the rounded side of the head is down.

- If nursing, keeping the flat side up should be easy on one breast. For the other breast, try the "football hold" See the education sheet, "Breastfeeding".

- If bottle-feeding, you may need to switch arms. While it might feel awkward at first, it will soon become routine.

Tummy time

When awake, your baby should spend plenty of time on his tummy. This relieves pressure to his head. It also strengthens the back, neck, and arm muscles, which are needed for holding the head upright, rolling, sitting, and crawling. Babies who aren't used to being on their tummy may be challenged at first. It is important to keep trying.

Here are some ideas to help your baby learn to enjoy tummy time.

- It works best if your baby is well rested and happy before trying tummy time.
- Begin with just 5 minutes of tummy time every time your baby is awake and slowly work up to 20 minutes.
- If playing on the floor is challenging, propping your baby at an angle can make it easier to lift the head. You can use:
 - a small pillow (such as a Boppy® pillow).
 - towel roll under the arms and chest.
 - a foam wedge.
 - yourself. Baby can lie across your knees while you're sitting, or on your chest while you're leaning against the couch or lying on your back against a pillow.
- Put your baby's favorite toys within reach.
- Put a mirror in front of your baby.
- Get down on the floor in front of your baby and sing or talk quietly.

- If your baby gets tired, you can roll him onto his back to rest for a moment, or carry him for a while, and then try tummy time again.

Be patient. Your baby may be challenged a bit at first, but stick with it. As your child gets stronger, tummy time will be more fun. The benefits are worth it.

Travel

In a car, **always** use a car seat. Take your baby out of it as soon as the trip is over. Using rolled towels alongside your baby can help him stay in the correct position. **Never** put padding **behind** your baby in the car seat, as this reduces the crash safety of the car seat.

Carrying

To carry your baby when you need your hands free, such as when shopping, try a sling or chest carrier that avoids pressure to the head.

Toys

The **best activity** to help your baby develop motor skills is tummy time. While the following toys are good ways to spend a **little** time each day, your baby should spend most of playtime on her tummy. The use of the following toys does not make your baby learn to sit or stand sooner. They can, in fact, delay the onset of these skills when used too long at a time.

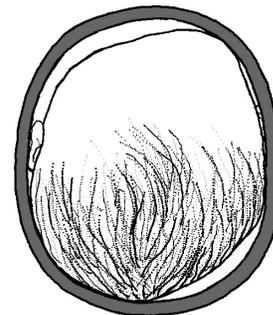
Exer-Saucer®: Babies often enjoy standing upright with support. Do not put your baby in an Exer-Saucer until he can hold his head and back upright (about 6 months or older). The Exer-Saucer will provide pressure relief to the head. (**Note:** Avoid walkers, which can tip or lead to falls down stairs.)

Johnny Jump Up®: When used properly, these are another way to provide short-term pressure relief for your baby’s head. They are safe when correctly installed in a doorway with trim. Fisher-Price® also makes a freestanding version. Your baby must be able to hold her head securely upright and be able to sit with some help (about 5 to 6 months of age).

Swing or bouncer: Limit these toys, as they press on the back of the head and can worsen the problem. Avoid them altogether or, if your child loves them, make this adjustment: When placing your child in it, slide a wedge under the shoulder on the side with the head flatness (use a rolled-up receiving blanket or a foam wedge). This will prevent baby’s head from resting on the flat spot. You can also position the swing or bouncer so that baby must rest on the rounded side of his head in order to see activity in the room.

How does helmet therapy work?

If repositioning doesn’t help after 2 months, or your child is older than 4 to 5 months of age, a doctor may prescribe a special helmet to help correct head shape. Worn 22 to 23 hours a day, it puts gentle pressure on the rounded areas while preventing pressure on the flat areas. (The amount of pressure applied by the helmet is similar to that felt when lying on the floor.)



If prescribed, a helmet will be made specifically for your child by an orthotics technician. The technician and the doctor will check your child's growth over time and adjust the helmet as needed. How long your baby will wear the helmet depends on several factors, including your baby's age and the degree of asymmetry; 2 to 6 months is typical.

Helmet therapy works best in children younger than 7 months of age. It is expensive and may not be covered by your insurance plan. Check with your insurance company before having your infant fitted for a helmet.

When should I call the clinic?

- if repositioning does not help after 2 months
- if your child has plagiocephaly and is older than 4 to 5 months
- if you have questions or concerns

What else do I need to know?

For more information, see the Craniosynostosis and Positional Plagiocephaly Support Web site at www.cappskids.org.

Questions?

This sheet is not specific to your child, but provides general information. If you have any questions, please call your clinic.

For more reading material about this and other health topics, please call or visit the Family Resource Center library, or visit our Web site: www.childrensmn.org.

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