



Are you worried about your baby's head shape?

Our free Guide to Head Shape and Early Intervention Techniques will give you answers to your questions, educate you on some simple activities to promote symmetrical head growth and ease your mind that you are taking all the right steps for your child.

[Welcome Video](#) (right-click on the video links and select "open in new tab")

Goals

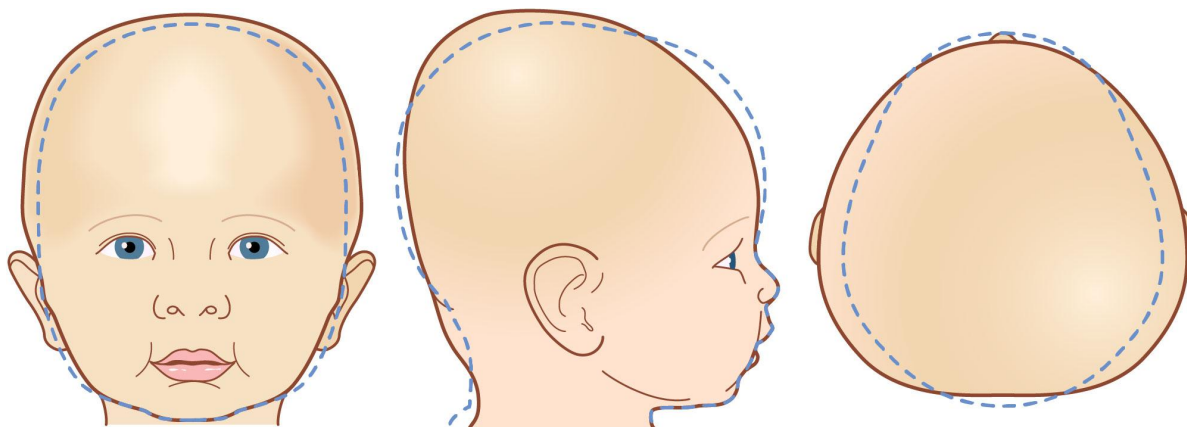
1. Identify your baby's head shape
2. Identify or rule out the presence of torticollis
3. Feel confident in tummy time and stretching activities
4. Know what your next steps should be

Identifying your baby's Head Shape [\(video\)](#)

Knowing what type of head shape you are dealing with can help you to know what types of activities and exercises to do. You will need to view your baby's head from several different angles to get a true understanding of the head shape. Let's review head shapes...

Brachycephaly

A brachycephalic head shape is characterized by a flatness on the back of the head, a wide and short head shape, increased vault height or slant from forehead to crown (the highest point of your head located at the upper back area of your head), and bulging above the ears. In severe cases, the back of the head comes straight up from the neck with little or no occipital rounding.

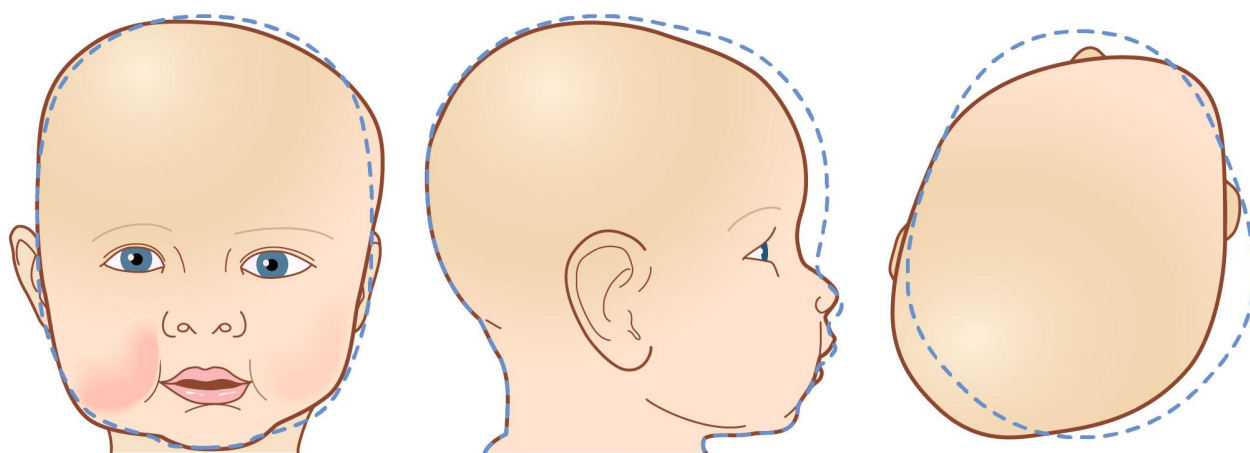


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Brachycephaly has historically been considered a cosmetic issue, however recent research has linked severe Brachycephaly with a misaligned jaw, sleep apnea, and ear infections.

Plagiocephaly

Plagiocephaly is characterized by a flatness on one side of the head, and corresponding bossing, or forehead protrusion on that same side. The ear on the side of the flattening is shifted forward, and the height of the crown is higher on the side of the flatness. There is often a flattening of the forehead, opposite of the posterior flattening.

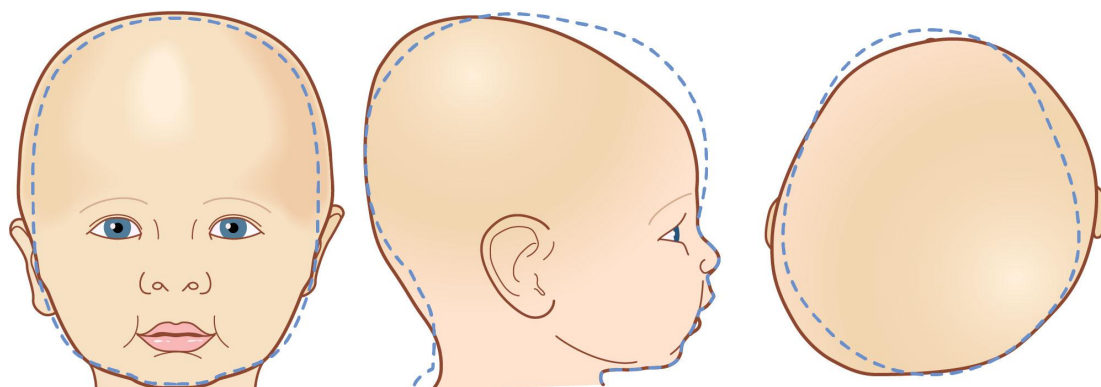


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Plagiocephaly is often linked to an underlying neck tightness called torticollis. Torticollis limits the neck range of motion (ROM) and can cause a weakened muscle on the side opposite of the tightness. Torticollis often requires intervention from a physical therapist, chiropractor, or another medical professional. When severe enough, plagiocephaly results in facial shifting and has been linked to visual impairments, jaw shifting, misaligned ears, and increased ear infections.

Assymetrical Brachycephaly

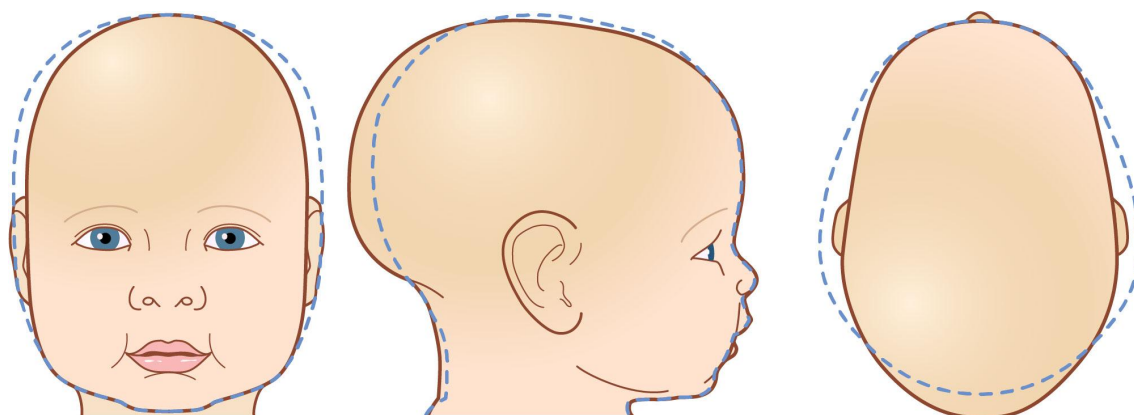
This head shape is a combination of brachycephaly and plagiocephaly and is one of the most common head shapes that we see clinically. There is an overall widening of the skull with one side of the back being slightly more flat. There is still an increased slope from the forehead to the crown and widening above the ears.



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Scaphocephaly

This head shape is characterized by a long narrow head with excessive occipital rounding. This is less common and often seen in babies who were premature, had been side-lying (typically due to feeding difficulties) for extended periods of time or had other medical issues.

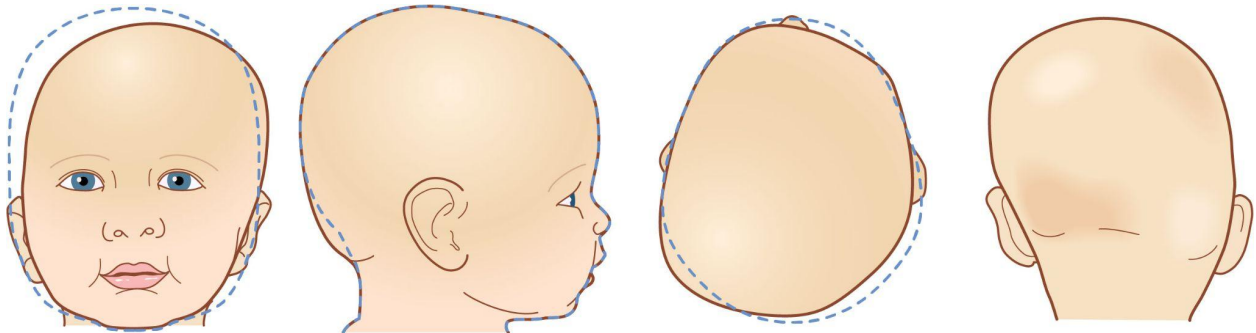


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Craniosynostosis- unilateral lambdoid fusion

Craniosynostosis is a more severe condition and often requires surgery to resolve. Craniosynostosis is not caused by positioning or external forces acting on the head, but an early fusion of the skull plates. Unlike position deformities, which do not impact brain growth, craniosynostosis can limit brain growth. Clinically a pediatrician will often diagnose this and refer to a pediatric neurosurgeon. These cases will have fairly obvious characteristics such as severe facial deformities, ridging along the suture lines, and a clinical presentation inconsistent with deformational plagiocephaly or brachycephaly.

Unilateral coronal lambdoid fusion can sometimes be confused with plagiocephaly. The biggest clinical difference is that instead of the forehead, ear, and eye being seaming “pushed forward” on the side of the flatness, there is anterior and posterior flatness on the SAME side and the ear is “pulled backward”.



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Causes of Head Asymmetry [\(video\)](#)

Flatness of the head is caused when there is prolonged contact or pressure on one area of the head. The head will grow in the path of least resistance. This is what causes the deformity and is the principle behind cranial remolding helmets which help to correct the deformity. The sustained contact could be for a variety of reasons, as listed below:

Muscle Imbalance

A neck tightness, called **torticollis** or CMT, is a condition where your baby lacks the ROM and/or strength to be able to look in both directions. This causes them to be looking in one direction nearly all the time, and a sustained force to be applied on that side of the head.

Intrauterine constriction

This is often the case with twins or multiples. Tight living quarters can cause irregular positioning which can contribute to head shape deformities as well as muscle imbalances. Often one or more multiples will have torticollis.

Good sleepers

When a baby sleeps 10-12 hours early in life, it can predispose their head to a brachycephalic head shape. The younger the baby, the less head and neck control they have and the more they will stay in one position.

Large Head Circumference

A large head circumference means a larger downward force. The weight of the head acts as a force downward and the sleeping surface acts as a force upward.

Premature Birth

Babies who are premature have a softer skull than full-term babies which means the skull is more prone to the deforming forces mentioned above.

How do I know if my baby has torticollis? [\(video\)](#)

There is a simple way to test for torticollis or neck range of motion (ROM) issues. You will need two people to do this. Your baby's shoulders will need to be stabilized against the floor by one person. While one person is stabilizing, the other can take a light-up toy or another object your baby will follow with their head to test ROM. Bring the toy all the way to the left side and then all the way to the right side. Your baby should be able to get their ear touching the floor on both the left and right sides without lifting their shoulders. The torticollis is typically on the opposite side of the flatness. (left flatness = right neck torticollis. This muscle imbalance needs to be addressed by a physical therapist or chiropractor in order to regain neck range of motion and strength and prevent your baby from compensating and cause other muscle imbalances throughout the body.

Timing Matters [\(video\)](#)

Once a baby is beyond 4 months of age, I often advise against a "wait and see" method regarding cranial asymmetries. When a baby gets started with a helmet at 4 months of age we see a significant, often complete, correction of the head within 8-12 weeks. Compare this to the baby who gets started when they are 7-8 months, they will often spend 20-24 weeks in the helmet and complete treatment with less than optimal results.

So... what should I do

Get your baby off their back [\(video\)](#)

It is simple physics, the more time a baby spends on the back of their head, the flatter it is going to get. This is why a baby's head will typically stop getting worse around 4-6 months... because they naturally are spending less time on the back of their head. They are sleeping less and moving more. Increasing tummy time during the early months is strongly encouraged. Remember that tummy time is considered any time that your baby is in a position or activity that keeps them from lying in one position with their head against a flat surface. This can be on you, tummy to tummy, in a football hold with your baby over your forearm, belly downward, over your knees, either seated or in a bent knee position on the floor, or on a wedge or pillow. Repositioning is when you manually move your baby's head to a more appropriate position. Repositioning is effective until about 3 months. After this a baby has enough head control to move back to their preferred position, making your efforts

ineffective. You also want to limit time in carriers and swings that limit your baby's natural head and neck range of motion. Unfortunately, there are a lot of really nice swings, bouncers, and carriers that do this. There is a time and place for some of this equipment, but once you have noticed a flat spot, it's time to re-evaluate how much time your baby is spending on them.

Stretch ([video](#))

This is a great guide to stretching techniques for your baby. Even if your baby has not been diagnosed with torticollis, neck stretches can help to prevent any tightness or preferences. Really, we could all benefit from doing these neck stretches daily: [Torticollis Stretches](#)

Don't overanalyze

Once you see a flatness, it is hard to NOT obsess about it. You start to notice other kids' head shapes, other babies' head shapes, that bald man in front of you at the grocery store... Head flatness is not a life-threatening condition. It is treatable with conservative measures.

Get an evaluation ([video](#))

Once your baby hits the four-month mark you will need to make some decisions about how you would like to proceed with treatment. If your baby's head shape is still something that bothers you, it is probably best that you get an evaluation completed by a trained orthotist that specializes in cranial remolding helmets. That last part is very important, *any orthotist* can fit a helmet, but your baby's outcome is most reliant on a good-fitting helmet and a knowledgeable orthotist that you trust. At Baby Bear Cranial Clinic we offer Free consultations with or without a prescription.

If you would like to schedule an appointment for a free consultation you can click [here](#) to be directed to our scheduling portal.

