

Melinda's Helpful Guides #2 • Flat Head Syndrome

(Text from an article for an NCT newsletter).

As more and more babies seem to be developing “flat head syndrome” these days, we thought we would ask one of our NCT mothers, Melinda Cotton, who is also a practicing Cranial Osteopath, a few questions about flat head syndrome and what to do about it.

Here is Melinda’s helpful overview of flat head syndrome, its treatments and implications for you and your baby.

Q; What is flat head syndrome?

A; We see many babies with this condition in our practice, and it can be difficult for parents to get a simple overview of the subject, so a review should be helpful for parents and carers who aren’t sure what to do. What options they have if their baby has a “funny shaped head”?

There are a number of different kinds of misshapen heads that are frequently grouped together and referred to as “flat head syndrome”. As you will see, each head shape has it’s own particular reasons for existing.

I am mainly going to discuss “Positional Plagiocephaly”, because this type of misshapen head is most common, and more importantly it is usually preventable!

Plagiocephaly comes from the Greek words Plagios meaning oblique or crooked, and from Kephale meaning head. So literally plagiocephaly means “oblique” or “crooked head.” A baby with mild plagiocephaly has some flattening at the back of one side of the head, and with a more marked plagiocephaly there is flatness at the back of one side of the head, but also ears may not seem in alignment and one side of the forehead may bulge.



Mild Plagiocephaly

Plagiocephaly can develop before a baby is born, and this is known as “Primary Plagiocephaly”. It can develop whilst a baby is still in the womb, or after a difficult labour. Primary plagiocephaly is much less common than positional plagiocephaly, where head shape changes after birth. So, what might cause “positional” plagiocephaly”?

Melinda's Helpful Guides #2 • Flat Head Syndrome

Positional plagiocephaly, (also sometimes known as secondary plagiocephaly), develops slowly after a baby is born. It is known as “positional plagiocephaly” because the position a baby’s head lays on is a significant factor in the development of this kind of misshapen head. Parents often do not begin to notice it until about 6-8 weeks of age.

Q; Why are babies vulnerable to developing it?

A; A baby’s head is perfect for both protecting a baby’s brain during birth, and to cope with passing through the birth canal. A baby’s skull is made up of many bones that are not fused together. This helps the baby’s head pass through the birth canal and also enables a baby’s head to grow rapidly in the first year of life. There is an inherent softness and malleability in a newborn baby’s skull bones.

If a baby’s head falls predominantly to one side when lying on it’s back sleeping, resting, on a play mat, in the pram or in car seats, then that side of the head is vulnerable to becoming flattened. As the head flattens on one side, a baby’s head shape may gradually become more generally distorted as a whole.

Premature babies are more vulnerable to this problem because their bones are even softer, and often they have spent time in special baby care units where they may lie on their backs for more uninterrupted time than if they were at home. Twins and babies from multiple births are also more vulnerable, because they have less space in the womb, and sometime being squashed may lead to a distortion in their head shape, or a tension in their neck.

Q; Why would a baby’s head tend to fall to one side?

A; In a perfect world, a baby would have good symmetry and they would look equally to the right and left, but alas this is often not the case. If there is neck stiffness in some of the neck joints, tightness of the neck muscles on one side, a condition known as torticollis, or if a baby’s shoulder has been strained during the birth process, his or her head and neck will naturally prefer to turn more to one side. If the tendency for a baby’s neck to turn to one side does not resolve by itself there is a significant chance that he or she may develop positional plagiocephaly.

Q; Why do more babies seem to have positional plagiocephaly these days?

A; In the past babies were put to sleep on either their backs or alternating between their right and left sides. They did not spend long periods of time solely on their backs. The more mild neck tensions that can predispose a baby to positional plagiocephaly would often self-correct in these mixed sleeping positions, so these babies were less likely to develop this condition.

Since 1994, the Back to Sleep campaign was introduced to reduce the risks of Cot Death, “SIDS” – sudden infant death syndrome. Parents have as a result been putting their babies to sleep on their backs. This campaign has been a great success, however since it’s introduction there has been a huge rise in the numbers of babies developing positional plagiocephaly.

Melinda's Helpful Guides #2 • Flat Head Syndrome

If a baby habitually lies in only one position, the natural balancing effect of pressure on the head from different sides can be lost, and this risks the development of flatness where the baby's head is resting. And once it is flattened, the head tends to fall naturally onto that flat surface, rather than rolling this way and that freely. The lying on the back advice is only for when babies are asleep. The more your baby lies in a mixture of positions, the less the chance of their head settling into an unbalanced pattern.

Q; Are there any signs that I should look out for that may warn me that my newborn is more vulnerable to develop this condition?

A; Have a look at your beautiful baby and ask yourself the following questions.

- Is my baby tending to turn their head to one side more than the other? Trust your judgement.
- When my baby is lying down, do they look slightly “banana shaped”, to one side rather than lying straight?
- Does my baby find it more difficult to breastfeed from one side?
- Does one side of the back of my baby's head appear flatter? Even a little bit?
- Does one of my baby's ears appear more forward?
- Does one side of my baby's forehead appear more prominent?
- Does one of my baby's eyes look larger or more prominent?

If you are not sure, ask somebody else to look for you. In the glow of new parenthood our babies look perfect, of course, and somebody else's eyes might be helpful. If your answer is yes to some or all of the above questions then your baby may have a vulnerability to developing positional plagiocephaly, or he or she already has it.

Most cases of positional plagiocephaly are preventable. When positional plagiocephaly is spotted early, and a strategy is put in place to help a baby develop good and balanced neck mobility, and care is taken to avoid lying on the flat part of the head, most cases can largely or completely resolve.

As a cranial osteopath that treats many babies, I frequently see babies for a check up at about 2 weeks of age. Already by this age a significant number of my baby patients have a tendency to turn their head to one side. I believe that preventative advice should be given to all parents before they leave hospital, and this should be part of general baby care advice.

Melinda's Helpful Guides #2 • Flat Head Syndrome

Q; What I can do to prevent my baby developing a flat head on one side?

A; Awareness, and what you do at home, is the starting point. Parents can help their baby to develop good and balanced neck mobility.

Positioning

When your baby is asleep in his or her cot, pram or buggy, you could gently turn his or her head to face the other way.

When your baby is in her or her car seat, place a rolled up muslin on the side your baby tends to turn or lean to, to give support.

When putting your baby into their car seat, take care to get him or her nice and straight in the seat before you start your journey. Car seats ideally should only be used for travel. Once you have arrived at your destination, take your baby out of their car seat. Make sure the seat isn't too big or too small.

When carrying your baby in a sling, notice if he or she is looking to one side, and if so, think about what you can do to reposition or support his or her neck. Try to get used to using the sling over both your right and left shoulders and alternate.

Modifying daily Activities

As a mother and father you are the center of your baby's little world. Your baby loves to gaze and play with you. This is the most fantastic tool you have to help your baby turn his or her neck in a particular direction.

If your baby generally looks to one side, talk, sing and play with him or her from the other side.

Babies often turn their head in the direction of light, so positioning your baby so that when they look towards the light they are looking away from the side they prefer.

When bottle feeding, make sure you can feed with your baby in your right and left arms, and alternate between arms. If your baby prefers turning their head to the right, holding them to feed in your right arm will encourage them to turn their neck to the left and vice versa.

As breastfeeding mothers generally feed from both breasts, they generally don't need to worry so much about feeding position. However, if a baby has a tight neck on one side, it may be more difficult to latch that baby on one breast, or feeding may be more painful on one side. If that is the case I would suggest getting a baby check by a cranial osteopath, as releasing neck tension can make a big difference to the ease and comfort of feeding.

When carrying your baby in your arms, notice if he or she always looks in one direction, and if so think about what you need to do to encourage them to look the other way. You may want to carry them on your other hip, or support his or her head differently. Having toys, especially musical toys and mobiles, on the side you wish your baby to look to can be helpful.

Melinda's Helpful Guides #2 • Flat Head Syndrome

Tummy time

Tummy time, lying baby on their front, gives your baby's head an important break from having constant pressure on the back of his or her head. It importantly helps your baby to develop good head and neck control, and good strength in the shoulders and back to prepare them for crawling.

You can never start helping your baby to get used to being on their tummies too soon, remember many of us were put to sleep on our tummies from day one. Tummy time is most successful when your baby is not tired or hungry...

From birth you can put your baby on his or her tummy when they are awake. Little and often is the best way to start. Your baby may just be happy in this position for a few moments but gradually you will be able to extend the time.

When your baby is on their tummy on their play mat, get down on to the floor and play with them. Put toys, and books they like in front of them, think of games you can play with them, like peek a boo, playing with a mirror is good too.

When you lay down, you can have your baby lying on your chest.

When you are sitting, you can let your baby lie tummy down across your knees.

You could massage your baby's back after they have had a bath.

Let your baby spend a little time on their tummy after a nappy change

If your baby really will not tolerate time on his or her tummy, then rolling up a small blanket, and tucking it under his or her chest with arms forward can be helpful. Also removing socks can be helpful too, because your baby can use their feet without them slipping to give themselves greater stability.

Cranial Osteopathy

If you are concerned about your baby's head or neck, a baby check with a cranial osteopath can help identify why your baby is not moving his head correctly or why your baby is developing plagiocephaly. Cranial osteopathy is a very gentle treatment that aims to help restore good balance and mobility in a baby so they are starting life with good foundations for development.

Sleeping

If despite your efforts to reposition your baby's head, he or she still always wakes lying with their head to one side, or he or she is starting to develop flat spot at the back of their head, then you may wish to consider using one of the special baby pillows that are available to help prevent plagiocephaly.

The Swedish Health department recommends that all newborn babies should sleep on their backs with a soft pillow to help reduce the possibility of developing plagiocephaly, but this is not currently a UK recommendation.

Melinda's Helpful Guides #2 • Flat Head Syndrome

There are a number of pillows that are available,

- Babymoov Lovenest Baby Pillow - it is a red heart shaped pillow, for babies up to about 3 months of age. It can be purchased from online at www.mykiddistore.com, or from JoJo Maman Bebe.
- The Butterfly Baby Head Support Pillow is also very good, and can be purchased at www.antipressurepillows.com
- Lilla Kuddis Baby Pillow – a simple soft rectangular pillow that is only available online at www.lillakuddisbabypillows.co.uk

Q; If my baby has a flat head when should I be concerned?

A; If you have been following repositioning advice, and encouraging your baby to spend time on it's tummy, and you think his or her positional plagiocephaly is getting worse, you should consult your GP. An Osteopath, (who must specialise in babies), will also be able to give you advice about any next steps.

If you feel your baby's head is not growing, if there are any ridges on your baby's head, or if there is some delay with his or her development, consult your GP. Nobody minds helping to answer the questions of a new parent, and better to be safe and reassured.

There is another type of flat head shape, known as Brachycephaly. With this shape baby's head is very flat at the back and quite broad. Sometimes this head shape can be caused by a baby lying flat on their back. It is then known as Positional Brachycephaly and repositioning and tummy time are important. However, just occasionally this head shape can have another cause and it is important that your GP checks your baby over in case X-Rays are needed.



Mild Brachycephaly

Melinda's Helpful Guides #2 • Flat Head Syndrome

Q; I have seen a baby wearing a helmet to correct their head shape, do you think this is a good idea?

There is a time and a place for everything, and with some severe cases of positional plagiocephaly or positional Brachycephaly, that have not responded well to repositioning, and tummy time combined with cranial osteopathy, a helmet may well be an appropriate treatment.

I don't think a helmet should ever be the first course of action. Repositioning, tummy time, modified daily activities and a cranial osteopathic check over should be the starting point. A baby's head shape should be monitored for improvement and if there is little or no improvement with a severe case over a few weeks, a helmet may be beneficial. This is only ever true for a small number of babies. There is an optimum window of time, between 4-9 months of age, where a helmet can be most effective in helping promote good head shape. There is not need to panic if you think your baby has a misshapen head, as there is plenty of time to try more conservative approaches.

Case study

I recently had a baby referred to me aged 12 weeks with the most severe case of plagiocephaly I had encountered. I felt a second opinion was important, and sent the baby to a centre that specialises in treating babies with misshapen heads through the use of a helmet.

The parents had to wait several weeks for an appointment. In the meantime, I treated the baby weekly, and the mother was very diligent at following my advice regarding positioning, tummy time and modified activities. By the time the appointment came along, the degree of plagiocephaly was significantly less. Although a helmet was recommended, the parents decided to wait a little longer and see how thing continued to progress. This baby is now 6 months old and has an almost perfect head shape. A helmet in this case was actually unnecessary; although when I first met the baby I was almost certain a helmet would be required. Change is an unpredictable thing!

So to conclude, these days there are many options to get assistance if you have concerns about your babies head shape. In most cases, with some advice and perhaps treatment, things steadily improve.

Melinda Cotton, DO, is a consultant osteopath at Fulham Osteopaths, SW6 5HA and has been in practice since 1989. Should you wish to discuss any matters raised in this question and answer or to make an appointment, she can be contacted at Fulham Osteopaths on 020 7384 1851.

© Melinda Cotton 2011