

FLAT HEAD SYNDROME

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Do you have or do you know of infants like this?



Brachycephaly



Plagiocephaly

These little ones have flat head syndrome. This has become much more common within the last few years with 'back to sleep' advice that is to lie babies only on their back to avoid cot death, or Sudden Infant Death Syndrome. Hitherto parents were advised to turn the baby to sleep on the side, the back or the front to vary the pressure on the head, but now the weight of the head is always on the back.

As we know, the infant head has to distort, sometimes quite alarmingly, in order to be born. It is good that the head can accommodate and in most cases allows the baby to be born with the minimum of stress to both mother and baby. Usually, even within a few hours, the head miraculously billows out into a nice rounded shape again and all is well. This is because the head is so soft at birth and can change shape easily. After birth, bone is laid down rapidly.

If, however, the baby is born with a distortion that takes a little longer to fill out, or develops a torticollis, or wry neck, which limits the turning of the head, the baby can develop the habit of lying only one way. The constant pressure on one spot on the head inhibits normal development and flat head syndrome can develop.

Sometimes the problem can be more severe. The strains of a difficult labour or problems of development within the womb can cause even greater distortions of the head affecting areas which will not naturally fill out on their own. This will be exacerbated by constantly lying on only one part of the head. Sometimes this may even involve areas of the body further down the spine, perhaps with a curved spine or scoliosis.

What can be done about this? In most cases a great deal can be done by the parents. The syndrome is maintained by the constant pressure on the one spot of the head. Once even a small flattened area appears, the baby's head naturally falls onto that spot so it steadily becomes worse. Therefore, follow the centuries old advice to vary the position in which the baby lies (although the standard advice is still not to allow the baby to sleep unsupervised on its tummy). Use a specially designed soft baby pillow (see below). Lay the baby in the cot so that it has to turn off the flat spot to see into the room. While you are with the baby give it 'tummy time', lying face downwards or on its side. Be aware always of positioning the baby away from the flat spot. All the time that the baby is off the flat spot, the head will be slowly pushing out, like a balloon inflating. Since 2000 the Swedish Department of Health have recommended that all newborns and young babies use a soft baby pillow while sleeping on their back. This has resulted in a significant reduction in babies suffering with flat heads, but no increase in

cot death. There are no similar guidelines in this country, but the benefits of a specially designed soft pillow are confirmed by clinical experience.

What if these measures do not work? What if parents cannot keep the baby off the flat spot, or they do but it still does not work? Bring the baby in to see us at the Penn Clinic. There may be distortions in the base of the head which will not naturally expand out on their own. Some careful treatment may be able to release these distortions to allow the body to fill out naturally as it should. The ideal time for advice or treatment is the sooner the better while the head is still soft, although it is never too late to do something. Sometimes more help is needed. You may have seen babies with head bands such as this:



LOCband Cranial Remoulding Orthosis

These are orthotic cranial bands fitted by specially trained clinicians and are individually made. A 3D laser scan is taken of the head, with the baby seated on mother's lap. From this, a cranial remoulding orthosis is made to fit gently to the baby's head with the pressure off the flat spots. This allows the baby to have the head in any position while allowing the body to fill out the flattened areas naturally. The ideal time to start a band is between 4 – 7 months old.

Here are some examples of infants with cranial remoulding orthoses at The London Orthotic Consultancy, who work in co-operation with The Penn Clinic in Hatfield.

Brachycephaly Time in band 4 months



Before

After

Plagiocephaly Time in band 3 1/2 months



Before

After