

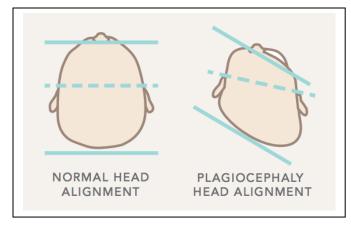
What is Plagiocephaly?

Plagiocephaly is the term used to describe cranial asymmetry or a misshapen head. This mild deformation of the skull may occur while still in utero, during delivery or be acquired in the early few months after birth. Most cases are caused by excessive, prolonged and uneven pressure on the skull, while some rare cases occur from uneven bone growth of the skull due to a suture that closes prematurely.

The neonate's skull has unfused bones with the ability to mould, assisting the passage through the birth canal. So it is quite normal to see a child's head temporarily misshapen immediately after birth. However, if you do not see the shape improve or in fact it become more deformed in time, we recommend an assessment with a paediatric-trained chiropractor.

Deformational plagiocephaly (the more common form) tends to peak at 4 months of age. Since some cases are caused by inutero constraint, an association is seen with higher birth weights, multiple births, hip dysplasia, scoliosis, club feet and perinatal clavicle fractures. Plagiocephaly also affects males at twice the rate of females, presumably because of larger head sizes.

However approximately 80% of deformational plagiocephaly babies begin with a normal head shape at birth. In these cases, a prolonged labour, excessive traction forces on the head and neck, and/or the use of extraction devices may be causative. These forces have the potential to damage neck musculature and sprain upper neck joints, upsetting baby's ability to comfortably turn to either side.

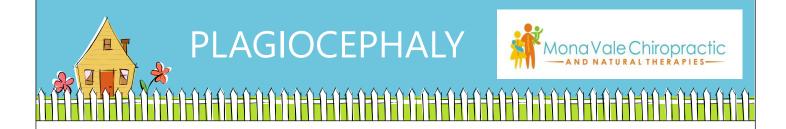




The SIDs "back to sleep" campaign has been very successful in saving lives. However, when a baby sleeps on its back and has developed a positional preference due to their inability to rotate their head, this fixed position unfortunately may also contribute to the deformation of skull shape. Please note - That is not to say don't sleep babies on their back! A better solution is to restore normal pain free movement for the child.

Parents of children affected by plagiocephaly are most often concerned about the effects on the child's cosmetic appearance. But it is important to understand this is not just about aesthetics - Many studies show babies with significant plagiocephaly have higher rates of a wide range of developmental delays, muscle tone problems and learning difficulties in both the preschool and primary school age groups.

Mona Vale Chiropractic and Natural Therapies Ph (02) 9979 7700 Suite 50, 90 Mona Vale Road Mona Vale NSW 2103



What can we do to help?

At Mona Vale Chiropractic and Natural Therapies, we firstly determine what type of plagiocephaly a child may have – whether they need to be referred to a paediatrician and if neck or cranial dysfunction is present.

We pay particular attention in assessing dural tension, the cranial sutures, the function of the upper cervical spine and the base of skull.

By gently releasing soft tissues and restoring normal joint position and motion, head mobility is rebalanced. Home stretching exercises may be given and re-positioning advice together with regular tummy time is vital.

On rare occasions referral for helmet therapy may be necessary but critically, helmets will only help with head shape and do not correct underlying neck pain or mobility issues.

In our office, Dr Stefan Kohlhoff (Chiropractor) measures and plots head shape deformity so we can track progress over time. Best results are seen if we can begin to address this within the first 4 months of life.

For more information or if you are concerned about plagiocephaly and its effects on your child, please call our practice on 9979 7700. We would be delighted to help you.



References

Wiebke K. Deitsch et al. Incidence of Cranial Asymmetry in Healthy Newborns. Pediatrics Vol 110 No 6. Dec 2002 B.Lynne Hutchison, Luke AD Hutchinson, John MD Thompson Ed. A Mitchell. Plagiocephaly and Brachycephaly in the First Two Years of Life: A Prospective Cohort Study. Pediatrics Vol 114: No.4 October 2004

Hutchison, B.L., W.S. Alistair, et al. Characteristics, head shape measurements and developmental delay in 287 consecutive infants attending a plagiocephaly clinic. Acta Paediatrica 2009; 98(9): 1494-1499

Brent R Collett 1, Kristen E Gray, Jacqueline R Starr, Carrie L Heike, Michael L Cunningham, Matthew L Speltzdentification. Development at age 36 months in children with deformational plagiocephaly Pediatrics 2013 Jan;131(1):e109-15.

Robert I Miller, Sterling K. Clarren. Long term Developmental Outcomes in Patients With Deformational Plagiocephaly. Pediatrics Vol. 105 No. 2 February 2000

Kane AA, Mitchell LE, Craven KP, et al. Observations on a recent increase in plagiocephaly without synostosis. Paediatrics 1996;97:877-885

Dias MS, Klein DM. Occipital plagiocephaly: Deformation or lambdoid synostosis? II A Unifying theory regarding parthenogenesis. Paediatric Neurology 1996;24:69-73

Mona Vale Chiropractic and Natural Therapies Ph (02) 9979 7700 Suite 50, 90 Mona Vale Road Mona Vale NSW 2103