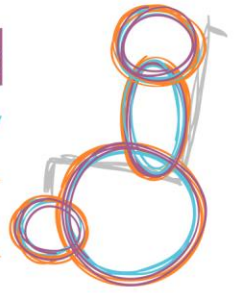


# Are infants with flat heads (Plagiocephaly) more likely to have early motor delays?

childhood  
disability  
LINK



## Summary

Positional plagiocephaly is an asymmetric flattening of the back of the skull, which may relate to prolonged positioning on the back. It is believed that infants with plagiocephaly may have less exposure on their tummy when awake, and therefore fewer opportunities to practice extensor movements against gravity such as lifting the head and trunk. This may influence early gross motor milestone development. The primary aim of this study was to compare motor development between infants diagnosed with plagiocephaly (flat heads) and typically developing infants of the same age and gender. Infants in this study were between 3 and 8 months of age and there were 27 infants in each group. Two standardized motor assessments were used and included the Peabody Developmental Motor Scale and the Alberta Infant Motor Scale. Parents were asked to complete a special diary that helped to record the infant's positioning throughout the day. Gross motor percentile scores were lower for the plagiocephaly group, and was close to significant ( $p=.06$ ). Better motor performance was correlated with a greater amount of time infants spent each day on their tummy when awake. This was true for both groups, those with and without plagiocephaly. Therapists and pediatricians should be aware that infants with plagiocephaly may be at greater risk for motor delays. It is also essential that parents of all infants be encouraged to place their young infants on their tummy for playtime (while awake) to optimize the development of gross motor skills.

## What families and practitioners should know

- Primary care physicians should inform parents of the importance of putting young infants in the first months of life on their tummy to play, while awake, so as to facilitate the development of motor milestones
- Physicians, rehabilitation specialists and other professionals should be aware that infants with a positional plagiocephaly (flat head) may be at greater risk for gross motor delay
- These infants should be specifically screened to determine if they require early motor interventions to optimize motor performance

## Reference

[Kennedy E, Majnemer A, Farmer JP, Barr RG, Platt RW \(2009\). Motor development of infants with positional plagiocephaly. \*Physical & Occupational Therapy in Pediatrics\*, 29\(3\), 222-235.](#)