

Torticollis, facial asymmetry and plagiocephaly in normal newborns

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Abstract

Objective: To evaluate the incidence and characteristics of torticollis, plagiocephaly and facial asymmetry in normal newborn infants.

Design: 102 healthy newborn infants were examined prospectively during their birth hospitalisation for torticollis with neck range of motion (ROM) assessment and for facial, mandibular and cranial asymmetry by photographic analysis.

Results: 73% of newborns had one or more asymmetry: torticollis (16%), asymmetry of the mandible (13%), facial asymmetry (42%) and asymmetry of the head (61%). Torticollis was associated with maternal report of the fetus being “stuck” in one intrauterine position for more than 6 weeks before delivery. Moderate facial asymmetry was associated with a longer second stage of labour, forceps delivery, a bigger baby and birth trauma. Moderate cranial and mandibular asymmetries were associated with birth trauma. More than one significant asymmetry was found in 10% of newborns.

Conclusions: Asymmetries of the head and neck are very common in normal newborns, and sixteen (16%) of 102 study newborns were found to have torticollis. Such newborns, especially if they sleep supine, are thought to be at risk of developing deformational posterior plagiocephaly. Identification of affected infants may allow early implementation of positioning recommendations or physical therapy to prevent the secondary craniofacial deformations that are part of an increasingly common phenomenon.

Footnotes

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Competing interests: None.

Ethics approval: Ethics approval was obtained from the hospital human research protection committee.

Patient consent: Obtained.