
This version is available at http://strathprints.strath.ac.uk/15050/

Strathprints is designed to allow users to access the research output of the University of Strathclyde. Unless otherwise explicitly stated on the manuscript, Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Please check the manuscript for details of any other licences that may have been applied. You may not engage in further distribution of the material for any profitmaking activities or any commercial gain. You may freely distribute both the url (http://strathprints.strath.ac.uk/) and the content of this paper for research or private study, educational, or not-for-profit purposes without prior permission or charge.

Any correspondence concerning this service should be sent to Strathprints administrator: strathprints@strath.ac.uk

http://strathprints.strath.ac.uk/15050/

This is an author produced version of a paper published in Developmental Medicine and Child Neurology, 50 (8). pp. 568-576. ISSN 0012-1622. This version has been peer-reviewed but does not include the final publisher proof corrections, published layout or pagination.

Strathprints is designed to allow users to access the research output of the University of Strathclyde. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. You may not engage in further distribution of the material for any profitmaking activities or any commercial gain. You may freely distribute both the url (http://strathprints.strath.ac.uk) and the content of this paper for research or study, educational, or not-for-profit purposes without prior permission or charge. You may freely distribute the url (http://strathprints.strath.ac.uk) of the Strathprints website.

Any correspondence concerning this service should be sent to The Strathprints Administrator: eprints@cis.strath.ac.uk
The review aims to determine how head shape is measured and describes the use of orthoses in the management of deformational plagiocephaly. A systematic review was conducted and papers published in English up to and including 2006 were sourced from nine databases. Initial screening of papers retrieved was conducted and consensus for inclusion reached according to specified criteria. Twenty papers were included; three literature reviews and 17 original papers. Of the original papers, eight concerned the method of head shape measurement. Measurements are important in determining clinical classification and treatment modality of deformational plagiocephaly. All studies were appraised and assigned a level of evidence according to the Scottish Intercollegiate Guidelines Network. Methodological quality was inadequate. Publications involving the use of cranial orthoses used convenience samples, were not blinded, and used different measurement techniques. No control groups were included and participants were not randomised. Evidence suggests that conservative treatments might reduce skull deformity although the quality is poor. Clinical studies investigating the use of cranial orthoses reported beneficial effects. Further research of appropriate design is required to identify the efficacy of cranial orthoses in the treatment of deformational plagiocephaly based on a standardised measurement technique to facilitate classification of deformational plagiocephaly.