

Original Articles

Treatment of Positional Plagiocephaly with Dynamic Orthotic Cranioplasty

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Dynamic orthotic cranioplasty (DOC) was developed to treat asymmetrical head shape of a nonsynostotic origin, which is defined by the term *positional plagiocephaly*. These positional deformations have been found to correlate with a number of environmental factors. Infants with positional plagiocephaly may exhibit complex multistructural asymmetry affecting the cranial vault, face, and skull base, or expression may be local in nature. Between 1988 and 1993, we performed DOC on 124 infants with positional plagiocephaly. Through clinical, anthropometric, radiographic, and statistical evaluation, we found that DOC corrects positional deformation of the cranial vault, skull base, and upper face, with no evident relapse following treatment. The design and the global approach to deformation address a wide spectrum of abnormal head shapes. The procedure is dynamic and customized, and it does not rely on passive growth alone for improvement.
