

FP09**Anthropometric changes in the skull base in children with sagittal craniosynostosis**

Hamilton Matushita, José Erasmo Dal Col Lúcio
São Paulo University Medical School, Brazil

Objective: Studies have examined the impact of fusion of the sagittal suture in the skull base, focusing on the morphology of the skull base in the presence of isolated sagittal craniosynostosis (scaphocephaly), while others have evaluated the growth of the skull base before and after surgery. This study aims to perform the anthropometric measures of the skull base in children with scaphocephaly to evaluate the influence of surgical repair in the remodeling of the skull base and anthropometric measures.

Methods: 21 children with clinical and radiological diagnosis of scaphocephaly were operated between April 2007 and October 2008, and anthropometric measures at the base of the skull were performed before and after a year of surgery. The measures were the cranial index (CI), distance between the crista galli and tuberculum sellar (CG-TS), distance between the crista galli and the internal auditory meatus (CG-IAM), distance between the oval foramen (OF-OF) distance between the internal auditory meatus (IAM-IAM).

Results: There was a normalization of the CI in all children, confirming an appropriate cranial remodeling. The CG-TS measure evaluated the anterior skull base, with proportional growth of 12.5%. The mediolateral growth was observed by the increase of OF-OF measures by 8.5% and IAM-IAM by 9.5%. The CG-TS measure grew by 7.2%.

Conclusion: Surgical treatment of scaphocephaly led to remodeling of the skull base, confirmed by the changes of anthropometric measures taken before and after a year of surgery.