CRANIOSYNOSTOSIS: State of Art in classification

ABSTRACT

INTRODUCTION: Abnormal skull shape resulting in craniofacial deformity is a relatively common clinical finding, with deformity either positional (positional plagiocephaly) or related to premature ossification and fusion of the skull sutures (craniosynostosis). Most cases of single-suture synostosis are likely caused by defective dural-mesenchymal signaling issues and are thought to be idiopathic, although genetic causes are increasingly being identified. Multi-suture synostoses are likely genetically influenced, either by single gene disorders or chromosomal abnormalities. Imaging is performed to define the site and extent of craniosynostosis, to determine the presence or absence of underlying brain anomalies, and to evaluate both pre- and postoperative complications of craniosynostosis. Following clinical assessment, imaging evaluation may include radiographs, high-frequency US of the involved sutures, low-dose (20–30 mAs) CT with three-dimensional reformatted images, MRI and nuclear medicine brain imaging. Craniosynostosis syndromes are uncommonly encountered in the prenatal period. Identification is challenging but important for family counseling and perinatal management. Evidence for intracranial hypertension may be seen both pre- and postoperatively, associated with jugular foraminal stenosis, sinovenous occlusion, hydrocephalus and Chiari 1 malformations. **AIM OF THE STUDY**:Aim of the study is to evaluate state of the art regarding Classification of Craniosynostosis based on Anatomical and Etiological criteria. **MATERIAL &METHOD** starting from a bibliographic revue about definition of Craniosynostosis, we consider anatomical finding first, and etiopathogenetic mechanism second, to define criteria used to describe condition generally enclosed in the term of Craniosynostosis. Than we consider state of art in Classification used to present.

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