

Pediatria

(1124) - RESULTS WITH THE APPLICATION OF BIORESORBABLE IMPLANT SYSTEMS USING AN ULTRASONIC DEVICE IN PEDIATRIC CRANIOFACIAL SURGERY IN THE CONTEXT OF CRANIOSYNOSTOSIS.

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Introduction:

Bioresorbable implant systems have been used in neurosurgery for the rigid fixation of cranial and facial bones. A relatively recent advancement has been the fixation of these implants using an ultrasonic device.

Objectives:

We perform a review of operative and postoperative results and complications of craniofacial reconstruction surgery due to craniosynostosis in our institution using these resorbable implant systems.

Methods:

There were 52 cases of patients operated between 2011 and 2016. Patients age at surgery was between 6,7 and 25 months with a median age at surgery of 12,4 months.

Results

We had no surgical mortality or serious complications. In 2 cases (3,8%) the patients needed reoperation – one due to fracture of fixation system and other due to a small wound dehiscence and material exposure. We had only 1 accidental small durotomy during surgery. Cosmetic results were classified as good or very good in 49 (94,2%) patients. For a median 3 years follow up (min-max: [1-6] years) the authors describe the outcome and intercurrents found.

Conclusion:

The use of bioresorbable implant systems applied using an ultrasonic device is a safe practice in the setting of pediatric craniofacial surgery. It's a user-friendly technique that shortens surgical times, can be molded and adapted to fit and permits a strong durable fixation. It completely replaces the need for metallic fixation systems. We found very few minor complications associated with this practice.

Palavras-chave : craniossinostose, implantes reabsorvíveis