Surgical Correction of Non-Syndromic Craniosynostosis

Craniosynostosis, the premature closure of cranial sutures, has existed since ancient times. Overall, it affects approximately 1 in 2000-2500 children, with the vast majority of cases classified as non-syndromic. Surgical correction is recommended before the first year of life.

Although surgery for craniosynostosis may be challenging due to the unique anatomic and physiologic characteristics of infancy, recent advances in the perioperative management of these patients have resulted in reduced morbidity rates and impressive results.

The aim of the current talk is to provide an overview of the contemporary surgical management of non-syndromic craniosynostosis. The basic classification, pathophysiology, current diagnostic methods, and surgical goals will be analyzed. A significant focus will be given to the surgical approach -particularly the open cranial vault reconstruction. Most common complications will be discussed, and long-term results will be presented.

A central component of the presentation will be the implementation of a comprehensive multidisciplinary culture and strategy to guide craniofacial teams in delivering optimal care to pediatric craniofacial patients.