

## Local Experience On The Long-Term Outcome Of Cranial Vault Reshaping Surgery In Craniosynostosis Patients: A Case Series

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### Introduction

Craniosynostosis, or premature fusion of one or more cranial suture, inhibits normal brain growth, which leads to serious sequelae such as impaired neurocognitive development and raised intracranial pressure. The authors present a series of 4 paediatric patients with craniosynostosis, who underwent cranial vault reshaping surgery.

### Report

Among the paediatric craniosynostosis patients we managed between 2012 and 2015, 4 were of particular interest because of severe copper beaten appearances on their CT scans. Among them, 3 patients were non-syndromic, while another one had Apert Syndrome. The patients underwent fronto-orbital advancement and cranial vault reshaping surgery between 48 to 56 months of age. During routine follow-up, all of them exhibited normal development for their respective ages with no neurological deficit. Repeated CT Brain 3D reconstruction 3 years post-operatively showed near-complete resolution of copper beaten skull appearance with good bony fusion.

### Conclusion

Neurocognitive sequelae in craniosynostosis patients is rather more overwhelming than aesthetic outcome itself. With advancement of the cranial vault reshaping surgery, both good neurocognitive development and aesthetic correction are achievable. Our patients benefited from both neurocognitive development and aesthetic improvement.