Cranioplasty In Neurosurgical Procedures: Experience At A Tertiary Care Centre

Dr. Shailendra J Solanki[1], Dr. Abhishek Chandra[2]*, Dr. Pradipkumar V Solanki[3] , Dr Jaimin K Shah[4], Dr, Nilay S Adhvaryu[5], Dr. Rushil G Khatri[6], Dr. Kaustubh Shah[7], Dr. Deep Shah[8], Dr. Spandan Kadam[9]

[1]Associate Professor, Department of Neurosurgery, BJ Medical College, Civil Hospital Ahmedabad, Gujarat.

[2] III year MCH Resident, Department of Neurosurgery, BJ Medical College, Civil Hospital Ahmedabad, Gujarat.

[3] II year MCH Resident, Department of Neurosurgery, BJ Medical College, Civil Hospital Ahmedabad, Gujarat.

[4] Professor & Head, Department of Neurosurgery, BJ Medical College, Civil Hospital Ahmedabad, Gujarat.

[5] Assistant Professor, Department of Neurosurgery, BJ Medical College, Civil Hospital Ahmedabad, Gujarat.

[6,7,8,9] 1st year MCH Resident, Department of Neurosurgery, BJ Medical College, Civil Hospital Ahmedabad, Gujarat.

*Corresponding author: Dr Abhishek Chandra

Email:neuro20abhi@gmail.com

ABSTRACT

Background: The primary aim of this trial was to study the efficacy of various cranioplasty materials available at our tertiary center and its related complications; thereby Standardising future protocols.**Material and Methods**: A total of 100 patients were selected as per specified criteria and two groups of Cranioplasty material types were created (Autologous and Artificial). Cranioplasty was done and results were compared for types of material of cranioplasty, early and late cranioplasty, complications associated with each type and overall cosmetic yield. **Results**: Patient undergoing Artificial cranioplasty within 6 weeks of primary surgery yielded superior results than Autologous cranioplasty and also had overall lesser complications. **Conclusion**: Cranioplasty with artificial material is better than those with autologous variety and patient specific engineered 3D Mesh are the future as they have lesser complications but better cosmetic yield.

Key words: cranioplasty, autologous, artificial