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One-Stage Repair and Reconstruction of Craniomaxillofacial Bone Defects

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ABSTRACT

Objective: Severe craniomaxillofacial injuries and craniomaxillofacial tumors can lead to craniomaxillofacial bone defects and deformities. Seriously affect the patients' appearance and quality of life. So one-stage repair and reconstruction of craniomaxillofacial bone defects is of great significance. The current study summarizes the clinical experience of one-stage repair and reconstruction of craniomaxillofacial bone defects. Material and Methods: Data in one-stage repair and reconstruction of craniomaxillofacial bone defects performed on 13 patients were retrospectively analyzed out of 34 patients with craniomaxillofacial injuries or tumors who received treatment at the outpatient department between January 2002 and March 2011. Surgical indications and approaches were explored after two typical cases were detected. Results: One-stage repair and reconstruction of bone defects was suitable for patients with craniomaxillofacial injuries and excised craniomaxillofacial benign tumors. Adjacent autogenous bones and artificial materials (such as titanium plates, titanium mesh, and so on) work well for the repair of the craniomaxillofacial bone frame and restoration of facial features. Conclusions: Surgical indications should be strictly selected in one-stage repair and reconstruction of craniomaxillofacial bone defects and deformities. Furthermore, the adoption of autogenous bones and artificial materials is a good choice in restoring the craniofacial features.

KEYWORDS

Craniomaxillofacial; Bone Defects; Repair and Reconstruction

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