Resorbable Plating is Safe and Effective for Orbital Fracture Repair

Marisa H. Amaral, MD, Jonathan Bass, BA, John Nigriny, DDS, MD, Joseph H. Shin, MD

Division of Plastic Surgery, Department of Surgery, Western Campus – Tufts University School of Medicine, Baystate Medical Center, Springfield, MA

**Purpose:** Over the past decade, clinical evaluations of the use of resorbable mesh plating systems have been variable. This study describes the primary use of a specific resorbable alloplastic product as a safe and effective method for management of orbital fractures through a case series of patients.

**Methods:** This study involves a retrospective review of medical records performed on a series of over fifty patients undergoing reconstruction of orbital fractures using a resorbable plating system at a single institution. Data points include patient demographics, mechanism of injury, category of fracture, symptoms related to injury and post-operative outcomes.

**Results:** Of 52 patients undergoing management of orbital floor fractures with alloplastic plating between 2008 and 2010, 75% (n=39) had isolated orbital floor and orbital blowout fractures. The remaining patients had more complex fractures involving the zygomaticomaxillary complex (21%, n=11) or pan-facial fractures (4%, n=2). The use of alloplastic plating for reconstruction of orbital fractures resulted in no early post-operative complications; there were no cases of inflammation, infection or prolonged edema. There were no specific complications related to plating or orbital fracture management, including: diplopia, enophthalmos or ectropion. There were no cases of plate extrusion or implant migration.

**Conclusion:** The options available for the reconstruction of orbital fractures are numerous, suggesting that no one single product maximizes the ideal combination of characteristics for orbital fracture reconstruction. The use of a resorbable plating system is a safe and effective alternative method for reconstruction, despite mechanism and size of injury.

**References:**

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