

Resorbable Plating is Safe and Effective for Orbital Fracture Repair

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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.

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Disclosures/Financial Support:

None of the authors has a financial interest in the products mentioned in this manuscript.