

Medpor implant fixation using fibrin glue in blowout fracture surgery.

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Publication Date: 2013

Abstract:

The Medpor implant is (Prous polyethylene, Porex Surgical Inc, Newnan, GA, USA) widely used to reconstruct orbital wall defects. However, this implant is commonly associated with numerous complications, including implant displacement. Therefore, the authors have hypothesized that fixation of the Medpor implant with fibrin glue (Tisseel, Baxter Healthcare, Norfolk, UK), compared to other fixation methods, may be more stable and could provide better results than other fixation methods. In this study, 485 patients who had been treated for blowout fractures from 2008 to 2012 were evaluated. Medpor implants fixed using Tisseel were used to reconstruct bone defects of the orbital wall. The patients' hospital records and radiologic images were reviewed according to sex, fracture site, and postoperative complications. According to retrospective chart review and radiologic evaluation, the complication rate was low and included diplopia (7%; 33 patients), enophthalmos (4%; 17 patients), and extraocular movement limitation (3%; 13 patients). This study suggests that Medpor implant fixation using Tisseel is a simpler, more secure, and more suitable for reconstruction of the fractured orbital wall compared with other methods.