ORBITAL COMPLICATIONS OF HYDROGEL SCLERAL BUCKLE -- A CASE REPORT

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Purpose: To report a patient with symptoms of orbital pain, limited ocular motility, sensation of orbital fullness, and presence of a subconjunctival mass 10 years after successful hydrogel scleral buckling surgery.

Method: A Case Report.

Results: A 72-year-old male presented with intermittent orbital pain around his right eye for one month. He had undergone surgical management for retinal detachment for 10 years. Upon physical examination, an elliptic protruding orbital mass (15mmx18mm) was located temporal-inferiorly to his right cornea. Exploratory orbitotomy removed fragments of hydrogel implant as well as a loosened stitch. Removal of the buckle was technically difficult; the hydrogel material was fragile and fragmented when handled. All the implant fragments were carefully removed as thoroughly as possible. Prompt relief of orbital pain and discomfort was achieved following surgery. Ocular motility also greatly improved.

Conclusion: Hydrogel implant may extrude from the orbital cavity, resulting in orbital complications. Patients developing this clinical condition should be considered for removal of the hydrogel scleral buckle. Early recognition of this condition may prevent serious complications associated with delayed removal.

Keywords: Hydrogel band, scleral buckle, retinal detachment, subconjunctival mass

INTRODUCTION

Scleral buckling is one of the most common operations used to treat retinal detachment. However, various post-operative complications have been reported¹⁻², some of which even result in the removal of the buckling element³. Here, we report a case with symptoms of orbital pain, limited ocular motility, sensation of orbital fullness, and presence of a subconjunctival mass 10

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