Commentary: Analyzing the factors causing implant exposure in evisceration

Evisceration surgery has come a long way from its first description in modern literature in 1817 by Bear[1], where it was performed for an expulsive hemorrhage. Since then the indications for evisceration has increased significantly,[2] painful blind eye being the most common indication for evisceration with implant.[3]

More than 130 year since the first orbital implant (a hollow glass sphere) was used by Mules in 1884.[4] Orbital implants have gone through a long phase of evolution. However as yet there is no unequivocal consensus of the best orbital implant with minimum risk of exposure and maximum prosthesis motility.[3]

Even the surgical technique for evisceration has undergone change to accommodate larger implant and reduce the chance of implant exposure.[5]

The indication for evisceration is increasing over enucleation[3] because of two important factors: first decreasing reports of sympathetic ophthalmia post evisceration and second reported better outcome (compared to enucleation) in terms of appearance and prosthesis motility.[5] Another significant advantage is the time required for evisceration is relatively less compared to enucleation.[5] Implant exposure is the most commonly reported complication of this surgery.[3,6] Many factors have been implicated for implant exposure from nature of implant, size of implant, surgical technique, pre existing infection, prior surgery, pegging of implant, poor prosthesis fit and surgeon's skill.[5,7,8]

Authors in this study have looked specifically for this complication of implant exposure following evisceration,[9] with intent to find the factors responsible. Although the study did not categorically point out any specific factor responsible for exposure, some of the previously known factors (infected eyes, phthisical eye, multiple prior surgeries and porous implants) have had higher association with the implant exposure. However, two important aspects of the surgery, the surgeon's skill factor and the technique of surgery, were not evaluated in this study. What is required to analyze the responsible factors for implant exposure is a larger study with these variables included to evaluate the outcome of evisceration with implant.

It is important to follow the newer inventions in surgery or implants to know their long-term viability. Porous implants (both natural and alloplastic) were once claimed to reduce the complication and improve the outcome of enucleation/evisceration surgery. More than 30 years down the line we realized the results are not that great.[10] Similarly, pegging was once thought to be the ultimate solution for prosthesis motility, with decades of experience we know better and the percentage of porous implants being pegged is on decline.[3]

The dust regarding the controversy of the best technique and the best implant has not yet settled, and therefore, we keep seeing reports of newer techniques and various implants in literature.[5] Let us hope that a larger study with more variables will give us the answer for the factors responsible for the complication and the best way to avoid the same.

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