

Orbital implant exposure following enucleation or evisceration

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Purpose: To study the exposure rate of orbital implant post enucleation or evisceration procedures in two tertiary hospitals in Oman. **Design:** A retrospective, descriptive, cross sectional study. **Materials & Methods:** Patients' records were reviewed for patients' demographics, surgical indications, implant types, follow ups and any reported complications after surgeries. Patients with a minimum of one year follow up period were selected. All patients who underwent enucleation or evisceration with primary orbital implant were included in the study. Patients who underwent secondary orbital implant were excluded from the study. Enucleation that involves the removal of unhealthy globe with a part of the optic tract is also performed for patients with severe eye trauma, panophthalmitis, painful blind eye, and patients with inherent anomalies, for instance, microphthalmia. whereas evisceration that involves the removal of the contents of the world, going the sclerotic coat, extra-ocular muscles, and optic tract intact is mostly thought of for patients with endophthalmitis or perforated tissue layer lesion. The orbital implant, used when surgical procedure and evisceration surgeries, has many distinctive blessings. These blessings area unit to interchange lost orbital volume, to take care of the structure of the orbit, and to help motility to the superimposed ocular prosthetic device. There area unit 2 main classes of implants classified per the fabric from that they're factory-made inert material (glass, silicone, alkyl methacrylate) and bio-integrated material. The inert implant characterised by providing comfort, cost-effectiveness, and lower rate of extrusion. Its disadvantages area unit weakened motility and risk of implant migration. On the opposite hand, bio-integrated implant provides glorious motility, however features a higher rate of operative

complications, like inflammation and exposure. A recent study has calculated a seven.1% exposure rate for all porous implants placed when surgical procedure from fifty eight antecededly printed studies. Another study showed that the exposure rate of hydroxyapatite orbital implants was three.9%–2.1%. different recorded complications enclosed mucosa organic phenomenon while not exposure three.5%, major discharge four.7%, mucosa cyst zero.2%, and severe mucosa swelling in zero.2%. Studies showed that the kind of surgery (enucleation or evisceration), surgical technique, implant size, use of wrapping materials, and comorbidities related to the explanation for eye removal area unit a number of the variables probably influencing...

Results: A total of 37 patients (age between 4 and 88-year-old, median age is 54-year-old) underwent enucleation or evisceration during 2008–2014. The most common indications for the surgical intervention were painful blind eye (35%), followed by trauma (16%), and perforated corneal ulcer (16%). Out of 37 patient's hydroxyapatite implant was implanted in 17 patients (46%), a glass or acrylic implant was implanted in 17 patients (46%), bioceramic implant was implanted in two patients (5%) and Molteno prosthesis was implanted in one patient (3%). There was no case of orbital implant exposure in any patients in this study.

Conclusions: No orbital implant exposure was recorded in this study. The surgical technique, end to end rectus muscles suturing used for enucleation/evisceration was the main reason for reduced implant exposure. In addition, the pre-existing ocular pathology did not affect the outcome of the study.