## Improving the outcome of prosthetic rehabilitation following orbital exenteration

Dear Sir,

Apropos the article recently published on prosthetic rehabilitation after orbital exenteration. [1] We commend the authors of the article for their scrupulous effort of rehabilitating such complex cases. Although the esthetic outcome achieved in all the cases is fairly good, yet as prosthodontists, actively involved in the rehabilitation of patients with ocular and orbital defects, we would like to some modalities that can further enhance the outcome of prosthetic rehabilitation in such cases.

Pruthi *et al.*<sup>[1]</sup> have rightly mentioned that silicone gives more life-like appearance and margins can be more precisely merged with the skin of the patient. However, it would have been appreciable if they would have mentioned the specific type of silicone used in such cases, that is medical grade heat temperature vulcanized (HTV) silicone. HTV silicone is preferable over room temperature vulcanized silicone due to its superior mechanical, esthetic and handling properties, owing to which it is possible to make the margins of the prosthesis feather edged so as to allow merging with the patient's skin.<sup>[2]</sup> In our clinical practice, we have seen few ill-treated cases where following the use of prosthesis, patient's reported allergic skin and mucosal reactions as industrial grade silicone/poor quality adhesive being cheaper materials had been used for fabrication/retention of facial prosthesis.

The esthetic outcome in Fig 3 and 4 illustrated by Pruthi *et al.*<sup>[1]</sup> would have been improved with the use of optical camouflage methods such as progressively tinted lens or negative sphere spectacle lens that provide the illusion of depth and improve the appearance of an orbital prosthesis.<sup>[3]</sup> Apart from this, the use of pin and socket of electric plug and magnetic buttons of wallet for retention though novel and cheaper methods, have a potential to harm the patient as a result of corrosion and hence it is prudent to use these options with caution.

Nowadays, to add to the liveliness of orbital prosthesis, a photodynamic iris that utilizes liquid crystal display technology and shows light reactive pupillary constriction, may be incorporated in the ocular component of the prosthesis instead of a static iris. [3] Furthermore, orbital prosthesis with a built-in blinking mechanism is gaining popularity that blinks almost synchronously with the natural eye. [3] With the advent of osseointegrated implants, today's anophthalmic patient does not need to be conscious about their prosthesis falling off. Placement of osseointegrated implants in the superior and lateral orbital bony rim can provide a stable and more retentive means of securing the prosthesis. However, appropriate case selection is necessary so as to rule out the presence of any risk factor associated with implant failure.

It is also important for the maxillofacial prosthodontist to know about the various surgical procedures of the eye and their indications. Pruthi *et al.*<sup>[1]</sup> have erroneously mentioned that indications for exenteration include

painful blind eye, disfiguring blind eye and prevention of sympathetic ophthalmia. For the above-mentioned conditions, enucleation is the treatment of choice and not radical exenteration. <sup>[4]</sup> Before rehabilitating such defects, it is important to collaborate with the ophthalmologist to precisely know the diagnosis/cause of defect/disfigurement and the adjunct ophthalmological/oculoplasty procedures which can alter/enhance the outcome of prosthetic rehabilitation so that individualized treatment plan may be formulated and the expected outcome can be explained to the patient before the initiation of prosthetic treatment.

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## References

- Pruthi G, Jain V, Rajendiran S, Jha R. Prosthetic rehabilitation after orbital exenteration: a case series. Indian J Ophthalmol 2014;62:629-32.
- Begum Z, Kola MZ, Joshi P. Analysis of the properties of commercially available silicone elastomers for maxillofacial prostheses. Int J Contemp Dent 2011;2:1-5.
- Aggarwal H, Kumar P. Surgical reconstruction or prosthetic rehabilitation following orbital exenteration: The clinician's dilemma. Indian J Plast Surg 2014;47:146-7.
- Takahashi A, Akimoto M, Hama S, Shirai Y, Minamiguchi S. Enucleation assisted with fillerfor open-globe injury. Eye Rep 2011;1:3-4.

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