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Facial cosmetic enhancement by secondary implant and ocular prosthesis to avoid camouflaging hair style

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ABSTRACT

Aim: Aim of this study is to assess the improvement in psychosocial awareness and self-image of surgical anophthalmic patient after cosmetic rehabilitation with secondary implant followed by ocular prosthesis.

Materials and Methods: It was conducted with 15 surgical anophthalmic patients who maintained a special and unnatural hair style to hide the facial deformity from others. These hair styles included growing long hair on a particular side of the head, covering part of the forehead and eyes. This makes other people curious and it does not look normal.

Result: After reconstruction of the anophthalmic socket by secondary ball implant along with scleral graft and followed by fitting of a well matching custom designed ocular prosthesis, the psychological condition, self-confidence of the patients were improved significantly. The follow up photographs of the same patient revealed that they no longer maintained the earlier special type of hair style. They looked confident in normal hair pattern.

Conclusion: The study suggest that the psychological well being of those living with facial deformity due to eye loss is related to having a pessimistic outlook and the beliefs a patients has about their appearance and how accepted they feel by the society.

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1. Introduction

Anophthalmic socket is a major factor of facial disfigurement and psychosocial setback to the individual as well as their family. In the aesthetic world, facial appearance is given much importance, eyes contributing most to it. Feeling of shame, insecurity, fear, inferiority and anger are very much common among one-eyed patients. They find it difficult to take part in social activities, to continue their education and to work.¹⁻³

If a patient doesn't receive a primary implant at the time of removal of the eye, the most challenging situation arises after couple of years of using Readymade Stock Eye in socket. The challenges are-

The socket might be very roomy without the volume replacement by the implant; hence the prosthesis to be fitted will turn out to be very large and heavy. This will put a lot of stress on the inferior fornix and lower eyelid and can result in lower lid laxity and ectropion in due course of time.⁴

The prosthesis without having an orbital implant will definitely show lower motility.

The eye would appear shrunken, deep seated with very low in terms of cosmetic value.⁵

Long term leaving the eye anophthalmic without implant will result in surface loss and volume loss within the socket and become contracted

⁶ This makes it tough to fit prosthesis.

Contraction of the socket can be classified, according to Gopal Krishna Classification:⁷

Grade 0: Socket is lined with healthy conjunctiva and has deep and well-formed fornices.

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Grade1: Shallow lower fornix or shelving of the lower fornix.

Grade 2: Loss of the upper and lower fornices.

Grade 3: Loss of the upper and lower, along with medial and lateral fornices.

Grade 4: Loss of all fornices and reduction of the palpebral aperture, in horizontal vertical dimensions.

Grade 5: In some cases, there is recurrence of contraction of the socket after repeated trials of Reconstruction.

Another classification (WHO) is as follows-

Mild grade: where only one fornix is involved and shortening of the posterior lamella of the lids.

Moderate grade: where both superior and inferior fornices are involved.

Severe grade: all fornices are involved along with phimosis of palpebral aperture.

Extensive loss of conjunctival surface area, deep cicatrix formation, atrophy of the orbital fat, fornix contraction and volume redistribution provides very poor cosmetic outcome with ocular prosthesis. The best treatment is always prevention and this can be done by placing an implant in the surgical anophthalmic socket.⁵ But if the socket had already started contracture, only placing a secondary implant will not do, requiring additional steps of socket reconstruction. This includes deepening the inferior fornix by fornix formation sutures, mucous membrane grafts. The introduction of the implant exerts a pressure posteriorly in the socket, pulling the orbital tissue surface and helps in creating a pocket like space (fornix) between the lid margin and the orbital tissue.



Fig. 1:

2. Discussion

Many patients are satisfied with their ocular prosthesis, but few individuals suffered lots.⁸ In that group describe problems with social interactions, body image and self-esteem. Psychosocial adjustment are variables from person to person and depends on the environmental factors,

but somehow associated with a series of cognitive processes. Orbital implants play a very crucial role for the rehabilitation of such patients both in terms of volume as well as the movement of the prosthesis. Different kinds of orbital implants are available nowadays for volume replacement. Mainly classified into two major groups- Non-integrated orbital implants (primarily PMMA) and Integrated Implants (bone, plastic). The most important factor of successful outcome is surgical expertise, using whichever implant system the surgeon prefers. Evisceration with primary implant may provide better motility and less superior sulcus deformity, but requires special care to ensure minimization of the risk of undiagnosed intraocular malignancy and prevention of sympathetic ophthalmia.^{8,9} Enucleation with implant by proper technique also most of the time serves the purpose. Rather a group of surgeons preferred enucleation over Evisceration. Of course optimal outcomes require good working relationships with experienced ocularists.

3. Conclusion

The patients experience considerable anxiety and depression specific to social situation enhance use techniques and strategies to hide their appearance and avoid social interaction. To overcome it, a socket reconstruction following cosmetically acceptable custom made prosthesis should be our topmost priority.

4. Conflicts of Interest

All contributing authors declare no conflicts of interest.

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References

1. McBain HB, Ezra DG, Rose GE, and SPN. The Psychosocial Impact of Living with an Ocular Prosthesis. *Orbit*. 2014;33(1):39–44. doi:10.3109/01676830.2013.851251.
2. Goiato MC, dos Santos DM, Bannwart LC, Moreno A, Pesqueira AA, Haddad MF, et al. Psychosocial impact on anophthalmic patients wearing ocular prosthesis. *Int J Oral Maxillofac Surg*. 2013;42(1):113–9. doi:10.1016/j.ijom.2012.05.028.
3. Macgregor FC. Facial disfigurement: problems and management of social interaction and implications for mental health. *Aesthetic Plast Surg*. 1990;14:249–57.
4. Sundelin KC, Kopp EMED. Kopp 1 ; Complications associated with secondary orbital implantations. *Acta Ophthalmol*. 2015;93(7):679–83.
5. Dave TV, Tiple S, Vempati S, Palo M, Ali MJ, Kaliki S, et al. Low-cost three-dimensional printed orbital template-assisted patient-specific implants for the correction of spherical orbital implant migration. *Indian J Ophthalmol*. 2018;66(11):1600–7. doi:10.4103/ijo.ijo_472_18.
6. Long JA, Tann TM, Girkin CA. Evisceration: A New Technique of Trans-Scleral Implant Placement. *Ophthalmic Plast Reconstr Surg*. 2000;16(5):322–5. doi:10.1097/00002341-200009000-00003.
7. Krishna G. Contracted sockets -I (Aetiology and types). *India J Ophthalmol*. 1980;28(3):117–20.

8. McBain HB, Ezra DG, Rose GE, and SPN. The Psychosocial Impact of Living with an Ocular Prosthesis. *Orbit*. 2014;33(1):39–44. doi:10.3109/01676830.2013.851251.
9. Pine K, Sloan B, Stewart J, Jacobs RJ. Concerns of anophthalmic patients wearing artificial eyes. *Clin Exp Ophthalmol*. 2010;39(1):47–52. doi:10.1111/j.1442-9071.2010.02381.x.

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