Ocular prosthesis: a case report

Faris Mohammed Shafi^{1,*}, Nishna Pradeep², Sreekumar³

¹Professor, ²Assistant Professor, ³Professor & HOD, Dept. of Prosthodontics, Kannur Dental College, Kannur

*Corresponding Author: Faris Mohammed Shafi

Professor, Dept. of Prosthodontics, Kannur Dental College, Kannur Email: dr.faris@outlook.com

Abstract

An ocular prosthesis or artificial eye (a type of craniofacial prosthesis) replaces an absent natural eye following, an enucleation, evisceration: or orbital exenteration. The rehabilitation of a patient who has suffered the psychological trauma of an ocular loss requires a prosthesis that will provide the optimum cosmetic and functional result.

Introduction

Often referred to as ocular prosthesis it roughly takes the shape of a convex shell and is made of medical grade plastic acrylic. A few ocular prosthesis today, are made of cryolite glass. A variant of the ocular prosthesis is a very thin hard shell known as a scleral shell which can be worn over a damaged eye. An ocular prosthetic does not provide vision; someone with an ocular prosthetic is totally blind on the affected side and has monocular (one sided) vision which affects depth perception. I these defects are psychologically disturbing for the patients, and therefore, they require immediate management and rehabilitation by a team of specialist. Fabrication of a custom ocular prosthesis allows for a better fit and comfort. 2

Case report

A 32 year old male patient reported to the Department of Prosthodontics for rehabilitation of lost right eye following an accident 1 year back. Examination of the socket revealed good healing, no signs of inflammation, and eyelids were unaffected [Fig. 1].

Procedure

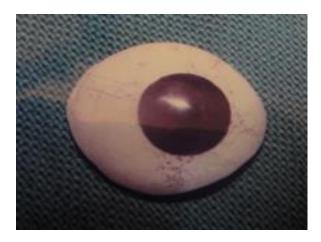
Vaseline was applied on the eye lashes and impression was made injecting light body Silagum impression material into the socket. Functional eye movements were made by the patient during the impression procedure. Impression was poured in dental stone. The defect was waxed up. Artificial stock eye shell was selected matching the patients left iris. The shell was trimmed and fixed in the wax up. The wax pattern was tried in the patient. Borders were perfected. The superior border of the pattern was adjusted by adding more bulk of wax to secure the same eye opening as that of left eye and to correct the sagging upper eyelid. The iris position was corrected. Wax pattern was then invested and acrylised. Few fibres from veined acylic were incorporated to get the effect of scleral vessels. The acrylised eye prosthesis [Fig. 3] was trimmed polished and inserted. A life like effect was secured in this case. [Fig. 2]



Fig. 1



Fig. 2



Conclusion

Since every socket differs in size and shape, it is obvious that an individually designed prosthesis, is needed to provide maximum comfort and restore full physiologic function of the accessory organs of the eye. Fabrication of a custom-made prosthesis allows infinite variations during construction and ensures better fit and patient satisfaction.

References

- Cain JR. Custom ocular prosthetics. J Prosthet Dent 1982;48:690-4.
- Mathews MF, Smith RM, Sutton AJ, Hudson R. The ocular impression: A review of the literature and presentation of an alternate technique. J Prosthodont 2000;9:210-6.
- 3. McArthur DR. Aids for positioning prosthetic eyes in orbital prosthesis. J Prosthet Dent 1977;37:320-6.
- Artopoulou LL, Montgomery PC, Wesley PJ, Lemon JC. Digital imaging in the fabrication of ocular prosthesis. J Prosthet Dent 2006;95:325-30.