

Rehabilitation of a Bear Maul :A Case Report

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ABSTRACT

Maul is to injure by rough treatment, manhandle, handle roughly or spoil the appearance. Among the wild animal attacks bear is the most common cause of human injuries. Deforestation has lead to the movement of bear from jungles to the planes. Bear maul is commonly seen in rural areas or where the population has migrated towards the higher reaches. Prosthodontist has always played a vital role in the restoration of form, function, aesthetics and social acceptability of such patients by giving maxillofacial prosthesis.

Keywords: Wild Animal Attack, Human Injuries, Prosthodontist, Maxillofacial Prosthesis, Facial Moulage

I. INTRODUCTION

Bear attacks are very rare but are well highlighted in the media even if very few people suffer from it.¹ Knowledge of ecology and bear behavior helps to prevent bear attacks as suggested by researchers². Over extraction of forests, tree felling and overgrazing are the reasons for the appearance of bear sloth.³

The face is the centre of attraction of the human body. Face is the part of the body which is attacked by the animals, but the incidence is 1.2 to 2.3% which is very less as compared to the rest of the body parts attacked by the animals.^{4,5} Bear attacks are most common of all the wild animal attacks, the incidence of which is 51.21%.⁶ Nearly 2.39% cases of bear mauling have lead to the death of the humans.⁷ Bear mauling also leads to the extensive damage to the eye ball and sometimes complete removal of the eye ball along with the eyelids as reported by Rasool et al.⁷

Management of bear maul case is a challenge for both the surgeon as well as for a Prosthodontist to achieve an acceptable tissue coverage, functional rehabilitation and aesthetics. Prosthetic replacement of the missing part is always preferred over the surgical reconstruction because it is less non-invasive, less expensive, has a good control on the colour matching and periodic

evaluation and cleaning of the site is possible. The only disadvantage is the tissue irritation and periodic remake of the prosthesis.⁸

II. METHODS AND MATERIAL

Case Report

A 65 years old male patient reported to the department of prosthodontics, Govt dental college Srinagar, with the history of bear maul one year back. The surgical part was done in SKIMS institute. The patient was having missing left eye and nose. (Fig-1),(Fig-2). A removable maxillofacial prosthesis was planned.

Clinical Steps:

1. Patient was prepared for making impression of facial moulage. The facial hairs of the patient were shaved off. The impression was made with alginate impression material. The cast was prepared with Type III Dental stone (fig.3).
2. Wax pattern was made on the facial moulage with the help of pink Base plate wax. The wax pattern included nose and eye in which pupil part of the prosthetic eye shell was embedded (fig. 4).

3. Patient was recalled and try in was done. During the try in step the symmetry of the wax pattern as well as the eye was checked (fig.5). After the complete satisfaction of the try in as well as the satisfaction of the patient, flasking, dewaxing and packing was done in heat cure acrylic resin, colour matching was done at the time of mixing acrylic resin as per the skin colour of the patient. Finishing and polishing of the prosthesis was done and was inserted to the patient. The retention of the prosthesis was partly obtained from the undercuts of the prosthesis and partly with the help of the spectacle given to the patient (fig.6). Patient was recalled after 24 hours for follow up to see any irritation of the mucosa due to the prosthesis.

III. RESULTS AND DISCUSSION

The four steps in the construction of a maxillofacial prosthesis include moulage formation, fabrication of working cast, sculpting and fabrication of wax pattern with colour matching, fabrication of mould and finally processing of the prosthesis.⁸ One more challenge in the success of the any maxillofacial prosthesis is to obtain an adequate retention of the prosthesis. Many retention methods have been used depending on the type, size, location of the defect, mobility of the tissues; tissue undercut and weight of the prosthesis.⁹ in this particular case tissue undercuts and spectacles have been used as a means of retention of the prosthesis.

IV. CONCLUSION

Bear maul patients have always had social stigma and are always avoided. Treating such patients and giving them social acceptance is a job of being much more than a doctor.

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Figures with Legends:

