

CASE REPORT

Mutilations: A Sad Story but Satisfactory Relief

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ABSTRACT

Maxillofacial prosthesis is the basic branch of dentistry dealing with the rehabilitation of congenital or acquired defects of mouth and face affecting function and esthetics through artificial means. Severe loss of any part of the nasal arch is fairly rare and is observed only as a result of accidental traumatic events or destructive processes of neoplastic, specific or granulomatous processes. In ancient times, this type of mutilation was much more frequent. Patients who were submitted to this type of mutilation, felt deprived of part of their very personality, attempted, in every possible way, to disguise the lesion, and even in very ancient times, reconstructive surgery or application of prosthesis were sought after. This study describes a detailed process of the nose prosthesis of a lady who had suffered mutilation.

Keywords: Mutilations, Nose prosthesis, Silicone prosthesis.

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INTRODUCTION

Midfacial defects may result from congenital or developmental abnormalities, accidental trauma, or acquired disfigurements due to removal of tumors during maxillectomy surgery.¹ There is also history of mutilation of the most extruding parts of the face (nose, ears, and lips) (Fig. 1). All these always lead to very severe impairment, not only of the body, but also of the individual's personality, since it results in a permanent alteration in the most noble and expressive part of the human body. The person had to attempt to overcome this situation in some way and the only way was to wear a mask or prosthesis, either fixed or removable, or attempt



Fig. 1: Mutilated nose after healing

reconstructive surgery. This was absolutely necessary in order to avoid showing off a face that was so disfigured that it provoked a sense of horror. Midfacial defects occur in the horizontal plane of the middle third of the face including two main categories: Midline and lateral defects. Midline defects refer to the complete or partial involvement of the nose, and/or upper lip, along with intraoral maxillary defects. Fabrications of facial prosthesis contribute to the recovery of anatomic form. Fabrication of an extraoral facial prosthesis challenges the artistic ability of the prosthodontists. Retention of the prosthesis is also a difficult problem because of its size and weight.²

CASE REPORT

A 45-year-old lady was referred from District Hospital, Raichur to the Department of Prosthodontia, Raichur for the treatment of midfacial defect. The lady presented with the nasal defect. She gave history of mutilation 6 years back. She has been wearing a gauze piece to cover the defect since then. She was not ready for the reconstruction surgery due to economic reasons. A silicone prosthesis was planned which could be retained with spectacle.

FABRICATION OF THE PROSTHESIS

Nose Impression

The impression area along with the defect area was cleaned and coated with a petroleum jelly. The edges of the defect area were outlined using an indelible pencil and the vertical and horizontal lines are retraced on both the defect areas for positioning purposes. The modeling wax was used to make a box to contain the impression material. Alginate was mixed and poured on the defective area. Pieces of gauze were placed on the surface of the

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Fig. 2: Impressions made



Fig. 3: Retentive acrylic attached to spectacle

alginate. Next a layer of fast set plaster was poured over the alginate to stabilize the alginate impression material. When the plaster was completely set, the impression was removed and poured in dental stone (Kalabhai Karson Pvt. Ltd.) (Fig. 2).

Acrylic Substructure

An acrylic pattern was fabricated to the required shape. This was also made hollow to reduce the weight. Grooves were marked through the pattern to aid in silicone retention. A hook was incorporated in the substructure so that it could be attached to the spectacles at a later stage (Fig. 3).

Wax Pattern

Pattern was fabricated by sculpting wax over the acrylic substructure. A satisfactory wax try in was done to check:

- The fit of the prosthesis on the tissue
- The correct horizontal and lateral alignment
- The integrity of the margins during simple jaw movements.

Later this wax pattern was flaked using dental stone and the mold achieved after dewaxing (Figs 4 and 5).

Color Matching

Color matching which is great challenge to the clinician was done at room temperature vulcanizing silicone and the intrinsic pigments (MP Sai Enterprise, Mumbai). The colors were mixed to achieve the appropriate characterization of the surfaces and the patient approval was sought. The shade matching was done using natural daylight.

Packing and Curing

Once the shade matching was completed, the material was packed and cured, for 48 hours at room temperature. Sharp scissors and scalpel blade were used to trim the residual flash. Extrinsic coloration was added to refine the color in the final prosthesis at the required area (Figs 6 and 7).³

The patient was instructed to be careful when removing the prosthesis so that the thin margins do not tear and not to wear the prosthesis during sleep so that air can circulate to maintain the skin health, If worn continuously, the dark moist environment underneath the prosthesis is ripe for bacterial and fungal growth, leading to inflammation and infection. It should be stored away from sunlight to prevent discoloration and degradation of the prosthetic material.



Fig. 4: After dewaxing



Fig. 5: Try in done



Fig. 6: Prosthesis attached to spectacle



Fig. 7: Final prosthesis in place

In summary, surgical reconstruction of large defects involving significant loss of cartilage requires staged flap procedures. For patients who refuse further surgery or who otherwise are not good candidates for reconstruction because of underlying medical problems or the need to have the surgical site monitored for recurrence of a particularly aggressive malignancy, the silicone auricular prosthesis should be considered.

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