



Nasal Speech in Total Bilateral Maxillectomy Patient with Two-Piece Obturator

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Received: September 24, 2021; **Published:** February 28, 2022

The provision of an obturator after maxillary resection is affected by the size and location of the surgical defect together with the integrity of remaining tissues. The complete maxillectomy defect creates problems with speech, swallowing, and esthetics. The basic objectives of prosthodontic therapy will include preservation of tissue, support, retention, and stability of the prosthesis for patients requiring obturator therapy for such maxillectomy defects [1,2]. Prosthetic rehabilitation of large maxillary defects with two-piece obturators offers the possibility of adequate oral rehabilitation by fabricating light weight prosthesis, which is easy to use. The bulb covers the undercut areas of the defect enhancing the facial contour and retention. It facilitates the restoration of the function and esthetics. Thus, it adds to the quality of life. The retention and stability of an obturator can be increased by weight reduction. Lightening the obturator portion weight will rehabilitate a better resonance to speech [2]. Maxillary resection affected the production of different speech sounds.

Patients with soft palate acquired defects having an increased nasal resonance as they cannot control an air flow into the oral cavity without an obturator. The insertion and removal of an obturator in large maxillary defects with or without trismus is difficult.

Fabrication of a two-piece obturator in such cases overcomes this problem.

Few prosthetic approaches to rehabilitate patients with bilateral maxillectomy are reported in the literature [3,4]. A sectional prosthesis is reported in which two halves of an obturator aligned by magnets were used to facilitate easy insertion and removal of the prosthesis from the locking effect of the soft tissue undercuts of the surgical defect [4].

A two-pieces obturator was constructed for our Maxillectomy patient (magnets used to attach them). The prosthodontist will re-

quire the assistance of a speech pathologist to evaluate the improper or inadequate nasal resonance. Two-pieces obturator was recommended in view of its improved nasality, ease of placement and convenience for both the patient and the clinician. Insertion and removal of a large prostheses used for rehabilitation of complete maxillectomy defect requires adequate mouth opening. Because these factors were problematic for such a patient, the treatment plan was to fabricate a two- piece magnetically connected prosthesis. After fabrication and insertion of the prosthesis, the fit between two sections was evaluated and instructions for insertion, removal, and maintenance of the obturator were given. The patient's speech and swallowing were improved after insertion.

Prosthetic rehabilitation of a large palatal defect needs skill and careful management.

This short editorial describes rehabilitation of a large maxillary defect with two-piece maxillary obturator. The obturator has a maxillary plate and a bulb component, which are approximated together by embedded magnets. Two-piece obturator design prosthesis offered several advantages: the ease of insertion for the patient and the dentist. It also augments both retention and stability of the whole prosthesis. However, such a design is problematic for geriatric patients and patients with compromised motor skills. In addition, even a slight movement between magnetically aligned sections may result in an excessive stress on the soft tissues of the defect.

Bibliography

1. Des Jardins RP. Obturator prosthesis design for acquired maxillary defects. *Prosthet Dent.* 1978;39:424-35.
2. Brown KE. Clinical considerations in improving obturator treatment. *J Prosthet Dent.* 1970;24:461-466.

3. Sjowall L, Lindqvist C, Hallikainen D. A new method of reconstruction in a patient undergoing bilateral total maxillectomy. *Int J Oral Maxillofacial Surg.* 1992;21:342-345.
4. Wang RR. Sectional prosthesis for total maxillectomy patient. *J Prosthet Dent.* 1997;78:241-244.

Volume 5 Issue 3 March 2022

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