

Oral Oncology Symposium

Abstract:

Fabricating a Maxillary Obturator with Minimal Weight Using Embedded Lid

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Purpose. Maxillary resection is required for a variety of benign and malignant tumors, inflammatory conditions, infectious diseases, traumatic injuries, and necrotizing lesions. The existence of a maxillary defect impacts speech, swallowing, mastication, and control of food bolus. In many situations, prosthetic obturation of the defect is used to mitigate these problems. When oronasal communications are present, prosthetic retention could not be obtained using atmospheric suction. Instead, retention is obtained from remaining teeth, soft-tissue undercuts, denture adhesive, and judicious use of dental implants. The weight of the bulb of the obturator could reduce retention significantly. It was shown that hollowing the obturator could reduce its weight by up to 33%. Different techniques were reported to fabricate hollow obturators.

Methods. This case report presents the prosthodontic rehabilitation of a patient who had an infrastructure maxillectomy to treat an osteosarcoma of the left maxilla. A maxillary obturator prosthesis was subsequently fabricated for the patient.

Results. The steps required to fabricate the obturator are presented. To limit its weight, the obturator was kept hollow using a lid that was entirely embedded into the acrylic of the conformer.

Conclusions. Other techniques have previously been described to decrease the weight of the obturator. One simple technique is to keep the bulb with an open-flange design. This will produce the lightest obturator, but accumulation of secretions inside the obturator bulb cavity may cause concerns. Alternative methods are employed to seal the hollowed obturator. The technique presented can permit sealing the hollow obturator from secretions while ensuring the absence of seams that could potentially leak after aging.

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