

AB095. SOH23ABS_085. The zygomatic implant perforated (ZIP) flaps and zygomatic implant-based rehabilitation for patients with maxillary and mid-facial oncology defects

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Background: The management of patients with a maxillary tumour is complex, especially reconstruction and rehabilitation. The techniques for closure or obturation of any oro-antral/nasal communication are well described. What is less well described is the effective and timely restoration of facial form and dentition, ideally prior to commencement of radiotherapy. The zygomatic implant perforated (ZIP) flap technique and zygomatic implant supported prosthesis provides immediate reconstruction and rapid dental rehabilitation. Herein, we describe their use in 4 consecutive cases of midface/maxillary oncologic ablative defects.

Methods: Patients who underwent ZIP flap/zygomatic implant reconstruction between January 2022 and November 2022 are described. The following variables were recorded: age, sex, pathology, ablative defect, number and location of zygomatic implants, median time to placement of prosthesis, and free flap outcomes.

Results: Four patients (3 males, 1 female) were included the study. The mean age at surgery was 68 years (range, 62 to 76 years). The pathologies were as follows: 3 squamous cell carcinoma and 1 olfactory neuroblastoma. Two patients had a total maxillectomy; 2 had an extended hemi-maxillectomy.

Two patients had a ZIP flap including a radial forearm free flap, and 2 had a zygomatic implant supported obturator prosthesis. The total number of zygomatic implants placed was 14. All had good primary stability. The median time to prosthesis fit was 22 days. All patients underwent adjuvant radiotherapy.

Conclusions: The ZIP flap and zygomatic implant retained prosthesis techniques provide a safe and reliable method for reconstruction and rehabilitation of patients with post ablative mid-face defects.

Keywords: Dental rehabilitation; free-flap reconstruction; maxillectomy; midface defects; zygomatic implants

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Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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