

# The zygomatic implant perforated (ZIP) flap for rehabilitation of patients with midfacial oncology defects: a report of three cases

**Précis:** This paper reports on the recent use of a novel reconstructive technique for three Irish head and neck cancer patients.

## Abstract

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. This paper describes the use of the zygomatic implant perforated (ZIP) flap technique to provide immediate reconstruction and rapid dental rehabilitation in three cases of midface/maxillary oncologic ablative defects.

Three patients who underwent ZIP flap reconstruction at St James's Hospital between September 2022 and March 2023 are described. One of them had a total maxillectomy and two had an extended hemi-maxillectomy. All patients had a ZIP flap including a radial forearm free flap, with four zygomatic implants in one case and two zygomatic implants in each of the other cases. All implants placed had good primary stability and the median time to prosthesis fit was 22 days. All patients underwent adjuvant radiotherapy.

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