

THE JOURNAL OF THE IRISH HEAD AND NECK SOCIETY

Title: A 10-year follow-up of immediate mandibular reconstruction using free fibula flap following ameloblastoma resection.

Body: Abstract

Ameloblastoma accounts for approximately 1% of all oral and maxillomandibular cysts and tumours. Despite being of odontogenic origin and benign, it has a high rate of local recurrence and can progress to malignancy if improperly treated. Increasingly, segmental mandibulectomy and immediate reconstruction with free flaps are being used for the treatment of mandibular ameloblastoma due to the advancement of craniofacial surgical techniques, the use of free flaps, and dental rehabilitation. This article explores the clinical outcomes and the bone remodelling of patients with mandibular ameloblastoma treated with segmental mandibulectomy and immediate reconstruction with free fibula flap.

Case Report: A young woman aged 28, has consulted the Oral and Maxillofacial Surgery Department of UHG, complaining of a left mandibular swelling. Panoramic radiograph revealed cystic lesion with bone destruction and the biopsy concluded ameloblastoma.

Result: The patient was treated primarily with enucleation and the primary infill of the bone was monitored closely, recurrent of tumour happened after two years. Thus, more radical approach was justified and reconstruction with a free fibula flap was done. 10 years follow-up showed the remodelling process to a satisfactory joint function and aesthetics, and the fibula head was remodelled to a condyle shape.

Conclusion: The free fibula flap is a versatile and reliable option for microsurgical reconstruction of large mandibular defects.

Authors: Laith Al sabek¹, Ahmed Almajmaie¹, Rana majid mansoor¹, Patrick McCann¹.

Affiliations: 1. Oral and Maxillofacial Department at the University Hospital Galway, Ireland.