

# Surgical Reduction of a Fibrous Tuberosity: A Case Report



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## BACKGROUND:

Pre-prosthetic surgery prior to denture fabrication may be necessary when treatment planning prosthetic cases. The procedure to remodel the excess fibrous tissue, is a surgical technique which reduces the fibrous tissue in the maxillary tuberosity area. This modification of the bulbous hyperplastic tissue is a technique sensitive procedure that will be outlined in this case presentation

## CASE REPORT:

A 55-year old female patient presented to the Department of Dental Medicine at Kingsbrook Jewish Medical Center. The patient was ASA 2 with a medical history significant for asthma, hypertension, epilepsy and a penicillin allergy. The patient was interested in having a partial denture fabricated as the final maxillary prosthesis. Tooth #2 was surgically extracted, and bone sounding was completed. This bone sounding identified an 8mm thick flabby tuberosity in the upper right quadrant. The area was allowed to heal for three months at which time the patient returned for the surgical reduction of the right maxillary tuberosity. This procedure was necessary to create adequate interocclusal space for the fabrication of a maxillary partial denture. Prior to the procedure, the mandibular right teeth occluded with the right maxillary tuberosity. The upper right quadrant was profoundly anesthetized via buccal and palatal infiltration with 136 mg of 4% Articaine with epinephrine 1:100,000. Bone sounding was performed, and the soft tissue thickness was mapped: 11 mm at the #2 position, 7mm at the #3 position, and 5mm at the #4 position (fig. 2). Surgical risks and benefits were reviewed with the patient prior to the procedure including the possibility of a second surgical revision. An elliptical incision was made with a 15 blade to the level of the bone (fig. 3). A wedge of excess tissue was removed and a buccal osteoplasty was completed utilizing a bone file with copious saline irrigation. A continuous interlocking suture with 3-0 chromic gut along with 3 interrupted sutures were placed (fig. 7). Immediate post surgical evaluation of the interocclusal space revealed that there was 7 mm of available restorative space between the maxillary and mandibular arches on the right side (fig.6). Post-operative instructions given to patient. At the one week follow up appointment, the tissue appeared healthy, pink in color with no erythema or swelling. 7mm of available space was present between the maxillary ridge and the mandibular occlusal plane. An impression was taken with alginate and a resin based partial was fabricated in the traditional manner.



Fig.3 Initial elliptical incision cut down to bone



Fig.4 Re-approximation of the tissue



Fig.5 Evaluating if enough tissue was removed



Fig.6 Image showing 7mm interocclusal space



Fig.7 3-0 Chromic gut continuous interlocking sutures and 3 interrupted sutures



Fig.8 Lateral view once sutures were placed



Fig.9 Post-operative image at denture delivery

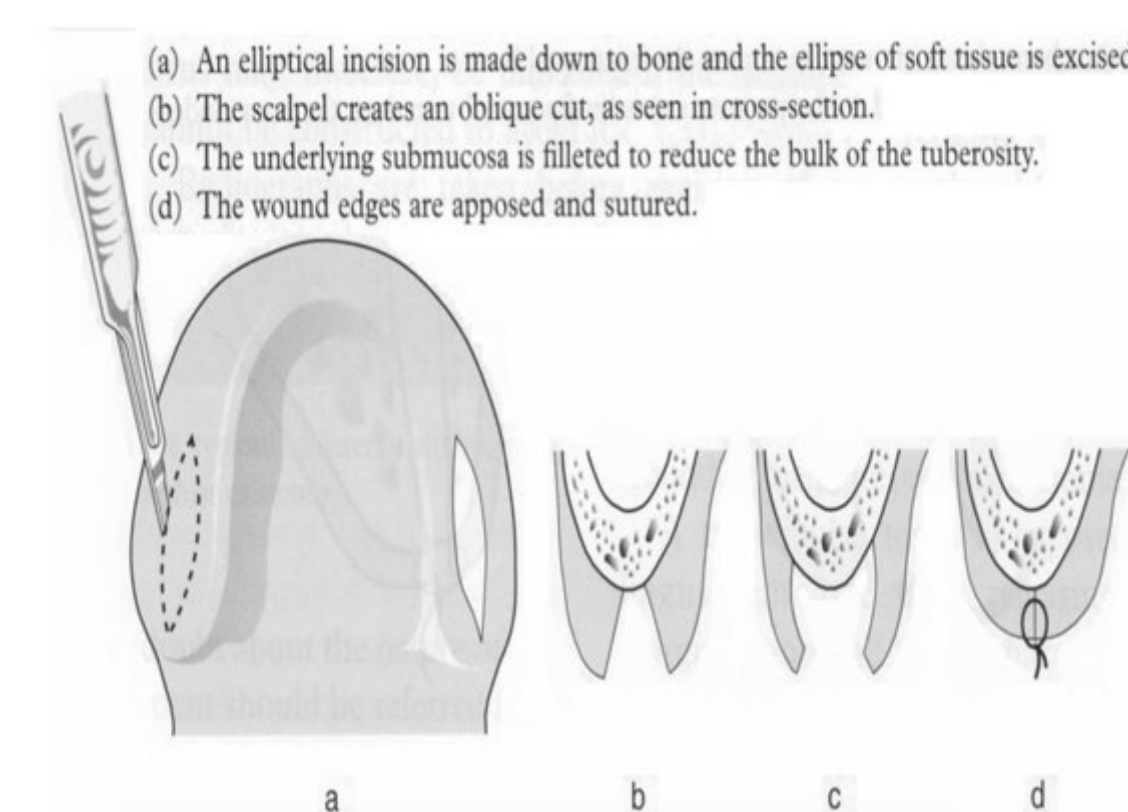


Fig.10 Image taken from "Reduction of Hyperplastic Tuberosities"



Fig.11 3 month follow up

## CLINICAL FINDINGS:



Fig. 1 Pre-operative: Insufficient interocclusal space for denture



Fig.2 Pre-operative: 11mm probing depth (bone sounding)

## CONCLUSION:

The purpose of this poster is to outline a surgical treatment protocol for a patient seeking a removable partial denture who lacks adequate interocclusal restorative space. Had the patient had the appropriate interocclusal space, the surgery outlined may not have been necessary and a mucostatic impression protocol could have been utilized to capture the flabby tissue without distortion in the denture.

## REFERENCES:

Doran, John. "Reduction of Hyperplastic Tuberosities." *Exodontia.info*, www.exodontia.info/Biography.html.