

# SUMMERS TECHNIQUE: IS IT POSSIBLE WITH VIRTUAL PLANNING?

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## INTRODUCTION

The presence of atrophic maxillary posterior alveolar ridges is the main indication for performing maxillary sinus floor elevations, since the presence of insufficient bone remnant compromises adequate implant stability.[1,2] Currently, there are two widely used techniques for sinus lift: lateral and transcresal approach, which have been shown to be the most stable techniques for vertical increase of bone tissue.

## OBJECTIVE

The purpose of this study is to present a case of the use of a surgical guide for transcresal flapless maxillary sinus elevation and immediate placement of a dental implant.

## CASE REPORT

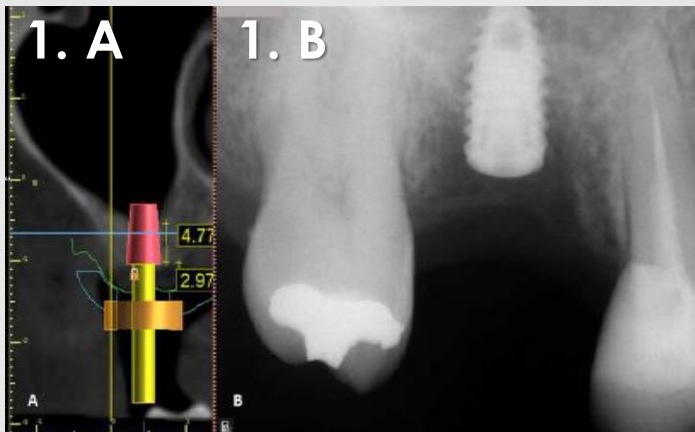
A 50-year-old female patient attended to of with the chief complaint of an edentulous space in the right posterior maxillary region.

### MODERATE ATROPHY IN THE RIGHT POSTERIOR MAXILLARY REGION (Bone height 4.1 mm)

CBTC + SCANNING → DICOM and STL files → Virtual implant placement and surgical guide desing

### MODERATE SEDATION + LOCAL ANESTHESIA

- The surgical guide was placed and the drilling sequence was initiated through a flapless approach.
- Through the use of rotary instruments, the elevation of the sinus membrane was performed until sufficient space was achieved, in order to pack a combination of cortico-cancellous bone allograft mixed with PRF made with Choukroun protocol.
- A 4.5 x 7.3mm IS II implant was placed using the NeoBiotech Naviguide System (Neobiotech, Korea) obtaining a 35Ncm torque.
- A periapical x-ray was obtained at eighth postoperative week and the correct position, depth and angulation of the implant were observed.



1. A. Bone height of 4.7 mm was measured during virtual planning and placement of the selected implant. B.Eighth-week postoperative imaging of the implant.

2. Prosthetic restoration of the upper right first molar with a screw-retained crown, six months after implant placement.

## CONCLUSION

In the literature review carried out for this study, there were no cases found where immediate implant placement would be performed using a guided flapless transcresal approach to the maxillary sinus with rotary instruments, allograft and PRF; constituting a safe, conservative approach, with shorter surgical times and less intraoperative trauma, improving postoperative results for the patient.

**THE AUTHORS DECLARE THAT THEY HAVE NO CONFLICTS OF INTEREST**

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