

## BACKGROUND

The socket shield approach provides numerous advantages compared to hard and soft tissue augmentation procedures, including the need for only one surgical procedure and reduced patient morbidity.

## AIM

The aim of this study was to present a case involving the Socket shield technique in the upper anterior tooth.

## MATERIALS&METHODS

A 41-year-old female patient, who is in good health, visited the dentist due to a movable crown on tooth #21.



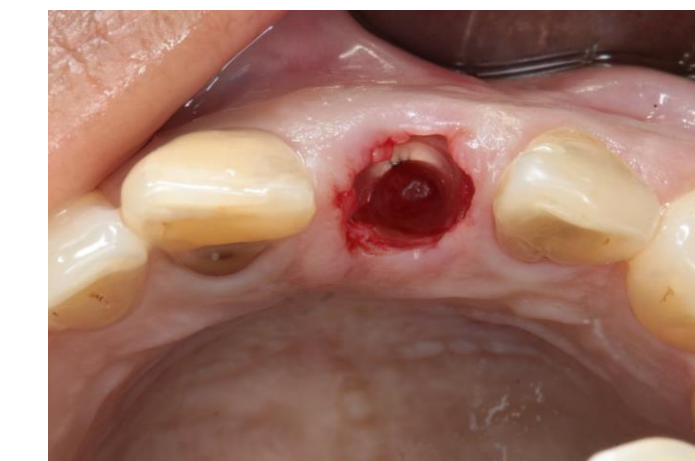
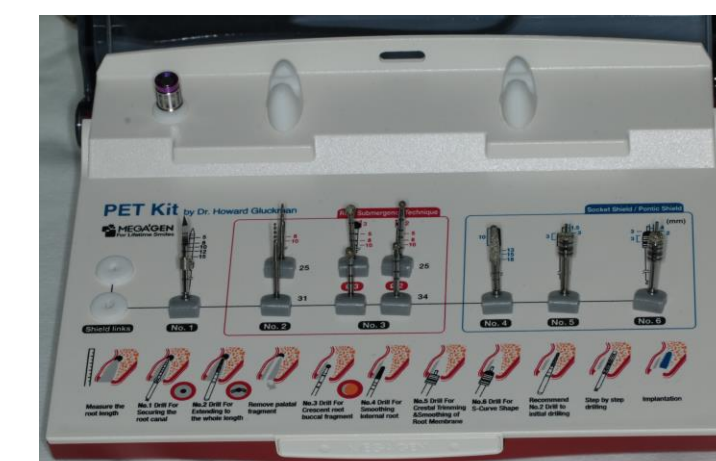
From radiological assessment, the sagittal cut of the CBCT revealed a very thin buccal plate with a thickness less than 1mm and limit alveolar bone in bucco-palatal direction. The diagnosis was endodontically treated tooth with crown-root fracture. Immediate implant placement was planned together with socket shield technique.



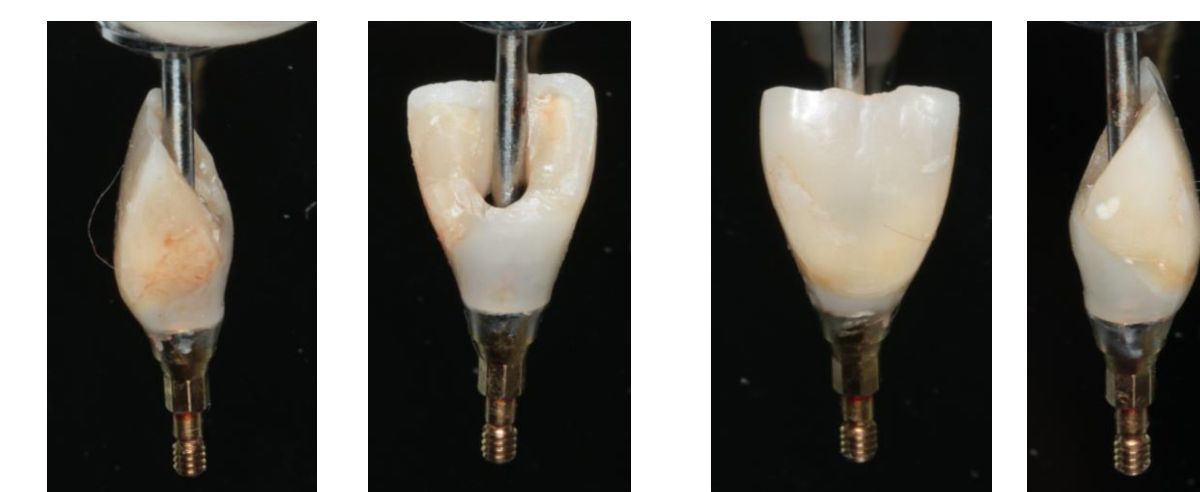
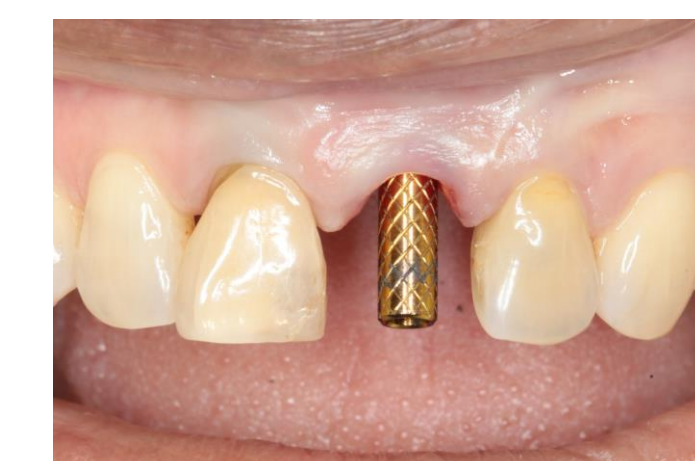
Under local anesthetic, the root was dissected in a mesiodistal direction along the long axis down to the apex. The root's buccal and palatal portions were separated. The buccal section was left intact, and the palatal component was carefully removed by periosteal elevator.



The buccal segment was precisely shaped in an apico-coronal and mesio-distal direction, resulting in a concave shape and decreased to the level of the crest using a Partial Extraction Therapy Kit (PET Kit®, Megagen, Korea).

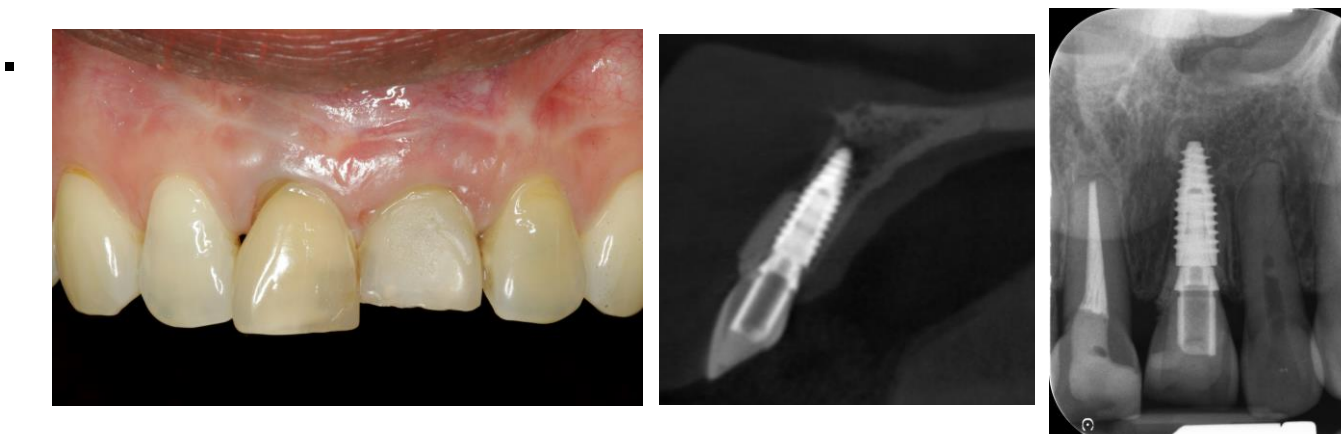


The Megagen® protocol was followed to successfully place an immediate implant (Megagen® Blue Diamond Implant, NC 3.7 x 11.5 mm) with adequate primary stability (45Ncm). The gap was filled with a synthetic bone substitute (EthOss®, United Kingdom).



## RESULTS

Immediate temporization was implemented by employing the patient's own tooth. After two weeks of follow-up, the patient had clinically stable results and a favorable soft tissue contour surrounding the implant. CBCT showed a significant position of implant and root shield.



## CONCLUSIONS

Socket shield technique is minimally invasive but requires surgically sensitive. Immediate implant placement appears combined with socket shield technique is appropriate for alveolar bone maintenance, that keeps marginal bone stability, and provide aesthetic results. Long-term follow-up is still in need to guarantee success.

## DISCLOSURE OF INTEREST

The authors declare no conflict of interest.