

A Case Study of Small Diameter Implant Placement

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The following is a case study of a complete denture stabilization using small diameter (mini) dental implants.

A 50 year old male patient presented after visiting three dentist and two Oral Surgeons. Their general treatment consensus included hip graft donation onto the maxilla for implant/denture stabilization. The patient had worn a complete maxillary denture for 30 years.

Oral examination revealed a flat anterior maxillary ridge offering no retention. (Figure 1)



Fig 1

Denture adhesive had been used daily to secure his maxillary denture. The instability of his denture caused much anxiety and embarrassment in his sales profession.

A CT scan image shows the narrow pre maxilla and small triangular wedge of bone present. (Figure 2)

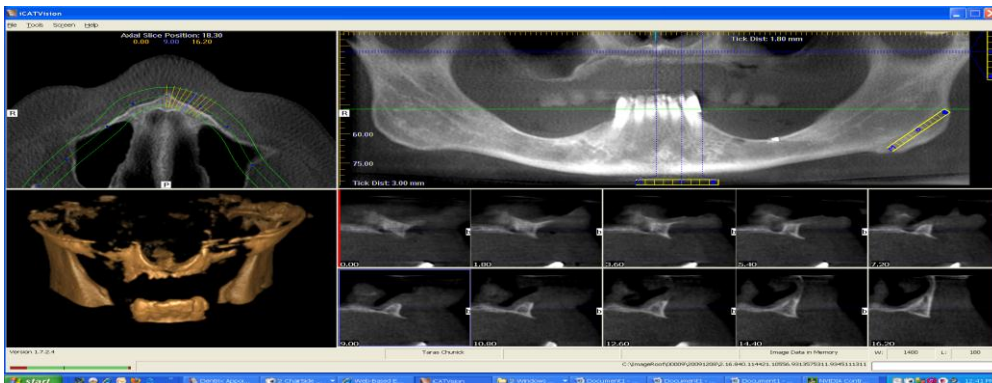


Fig 2

A complete clinical/surgical workup was performed. From this information a surgical implant placement stent was fabricated based upon the CT scan. (Figure 3)



Fig 3

The Shatkin First Technique {1} was used for the location and placement of pilot osteotomies. (Figure 4)

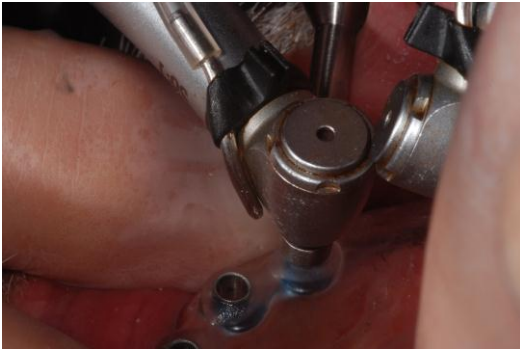


Fig 4

Six Intra-lock {2} small diameter implants (2.5mm x 15mm and 2.5mm x 10mm) were placed in the premaxilla. (Figure 5)



Fig 5

Post surgical Panoramic Radiograph reveals osseous placement of the small diameter implants. (Figure 6)

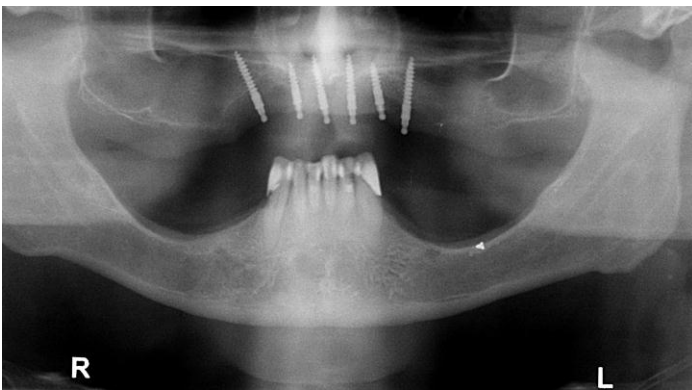


Fig 6

Discussion:

There are many patients for whom traditional implant therapy is not a viable option for financial or health reasons. Bone grafting, which many times accompanies traditional implant placement, presents an added morbidity/mortality risk for certain patients due to age or medical conditions. Non-invasive placement of small diameter dental implants for denture stabilization overcomes many of the traditional dental implant negative sequellae. This treatment outcome would have not been possible with traditional implant concepts. The patient has done well and is quite satisfied

References

{1} Shatkin First Technique, Shatkin TE, Shatkin S, Oppenheimer AJ, Oppenheimer BD. A simplified approach to implant dentistry with mini dental implants. *Alpha Omegan*. 2003;96(3):7-15.

{2} Intra-lock , Intra-Lock International, Inc. 6560 West Rogers Circle, Suite 24, Boca Raton, FL 33487