

5 Years with PALTOP Implants: Digitally Assisted Restoration of Posterior Occlusal Support

Surgery: Dr. Gil Asafrana



Restoration: Gil Asafrana, DMD

2011 – 2016

Patient Information

Gender: Male

Age: 68

Patient complaint:
"Hard to eat" due to missing posterior teeth

Past Medical History:

HBP drug control, post catheterization 3YR3 indicator Aspirin 10mg daily no contradiction for dental implants.

Reduced posterior occlusal support due to missing mandibular Molars on both sides.

Clinical Findings:

The patient has lost all of his lower Jaw molars, the last one #37 was recently extracted. Which complies with his main complaint.

Diagnosis:

Loss of posterior occlusal support due to lack of mandibular molars

Treatment Plan

Restoration of occlusal support with the use of implant supported crowns.

A minimally invasive flapless guided implantation with immediate concave multi-unit abutments for minimal tissue trauma and maximal tissue preservation.

An immediate abutment level digital registration for CAM provisional and final prosthesis is planned.

Materials and Methods

3D CAD of Implant position

PALTOP Implants #35-36, #46-47

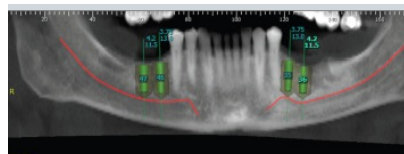
Surgical Guide: Tooth supported and fixed with retention pins.

Concave Multi-Unit Abutments

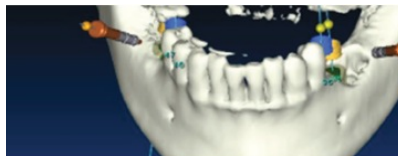
Digital Scans

Immediate PMMA Provisional

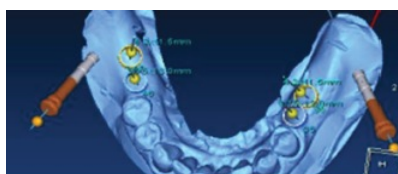
Final CAM ZIO2 Screw Retained Crowns.



Plan implants position 3D

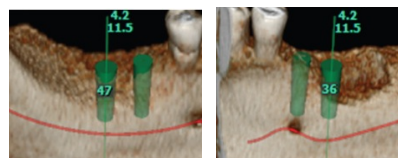
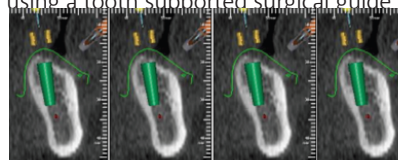


Surgical guide planned with retention pins



Strategy

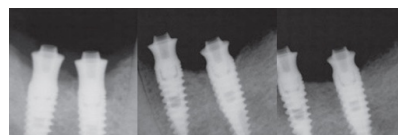
Planned Flapless Implant placement using a tooth supported surgical guide



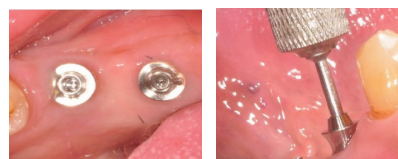
Surgical Guide



Implants Placed with immediate placement of Concave Multi-Unit abutments.



Digital Impressions were taken at the multi-unit level



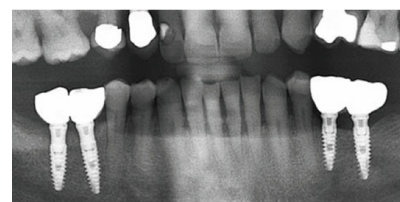
A CAD design was done on the digital scan of the multi unit abutments



Digital planning of prosthesis

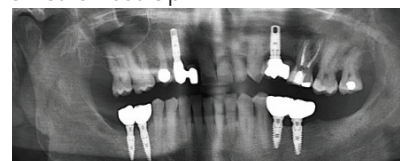


Full Monolithic screw-retained Zirconia crowns were placed on a multi-unit concave abutments.



Results

5 Years Post Op



Conclusion

Utilization of digital planning, guided surgery and digital manufacturing of implant supported prosthesis, coupled with PALTOP implants & implant concave prosthetic components, is a well established method of delivering our patients a more reliable, less invasive and high precision treatment, and should be a treatment strategy of choice in such cases.