



Case Description

A 81-year-old male patient, without systemic disorders, came to the appointment referring lack of masticatory function. After careful analysis of the clinical history, OPG and CT, we opted for a implant-supported oral rehabilitation. It was planned six implants in upper atrophic maxilla (Implant Direct – Swish Plus), with immediate placing of 2 implants after extraction and 2 posterior tilted implants due to the severe pneumatization of maxillary sinus and bone ridge resorption. The prosthetic phase was initiated 4 months after implants surgery.

Case Report

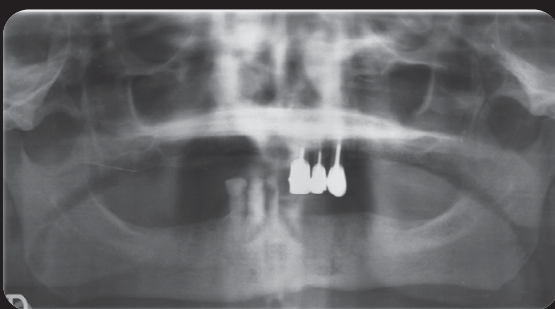


Fig. 1 – Initial OPG



Fig. 2 – Initial photo

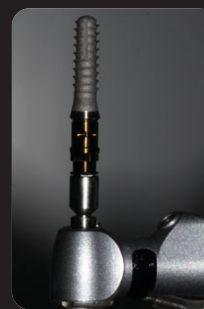


Fig. 3 –SwishPlus
13mm Implant

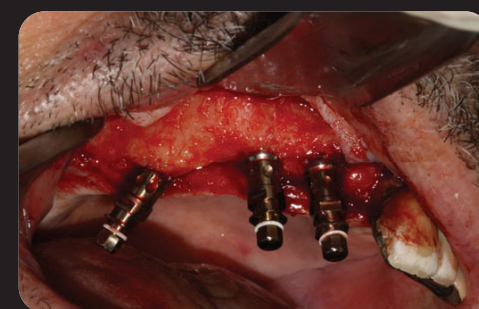


Fig. 4 – Implant placement at 1° Q.

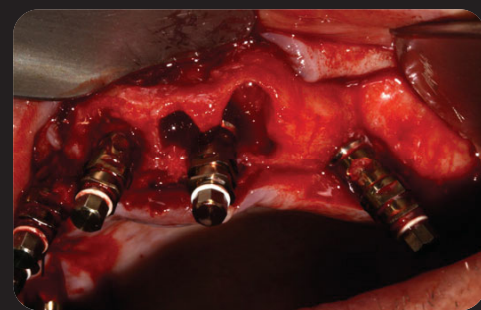


Fig. 5 – Implant placement at 2° Q.

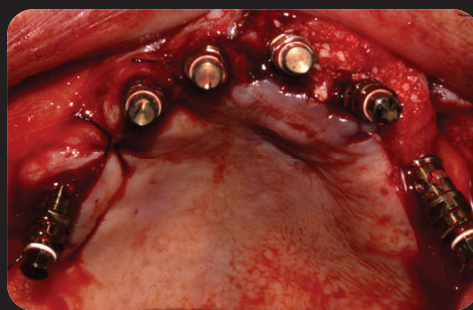


Fig. 6 – Post extraction sockets with
autogenous bone graft

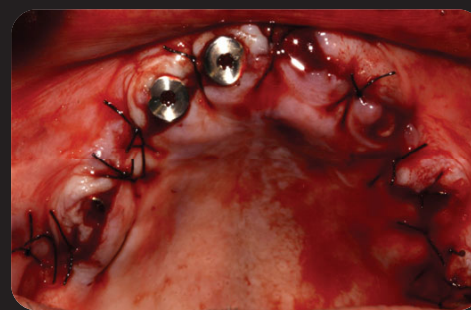


Fig. 7 - Suture



Fig. 8 – Post-healing image of gingival
margin

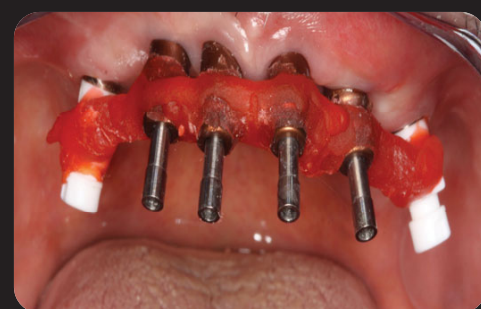


Fig. 9 – Ferulization of impression pillars
with duralay (pre-cutted at lab)



Fig. 10– Hybrid overdenture prosthesis –
occlusal view



Fig. 11 – Final photo

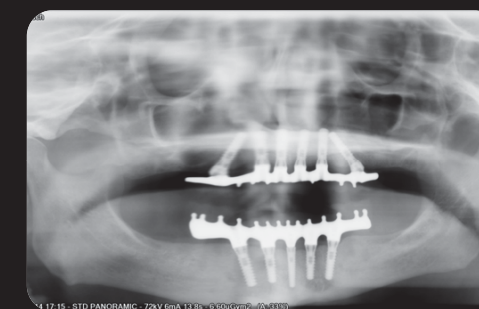


Fig. 12 –Final OPG

Surgery performed by David Alfaiate

Discussion

The placement of tilted implants with the objective of reduce the necessity of bone grafts and increase bone support has been reported by several authors and allows a viable rehabilitation, minimally invasive and with good acceptance by the patient. The placement of tilted implants is a viable surgical alternative in anatomic regions such as: the anterior or posterior wall of the maxillary sinus, the palatal curvature or the pterygoid process. ^(1,2)

This treatment option, allied to the use of longer implants, allows an improved primary stability favoring immediate loading. Also, allows the adequate distribution of the implants, resulting in a more uniform distribution of forces and the decrease or elimination of the cantilever. ⁽³⁾

This technique demands high surgical skills as well as a rigorous treatment planning. Some authors have been questioning the biomechanical qualities of this surgical option, however there are no statistical differences when compared with implants placed conventionally. ^(2,3,4)

Conclusion

Tilted implants allow an implant-supported rehabilitation of atrophic maxilla, decreasing the waiting time, the patient's morbidity and the costs of the treatment.

Bibliography

1. Calandriello R, Tomatis M. Simplified treatment of the atrophic posterior maxilla via immediate/early function and tilted implants: A prospective 1-year clinical study. *Clinical implant dentistry and related research*. 2005;7 Suppl 1:S1-12.
2. Pozzi A, Sannino G, Barlattani A. Minimally invasive treatment of the atrophic posterior maxilla: a proof-of-concept prospective study with a follow-up of between 36 and 54 months. *The Journal of prosthetic dentistry*. 2012;108(5):286-97.
3. Monje A, Chan, LH., Suarez, F., Moreno, PG., Wang, HL. Marginal Bone Loss Around Tilted Implants in Comparison to Straight Implants: A Meta-analysis. 2012; 27(6):1576-1583
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