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Title: Maxilla fixed total rehabilitation supported by implants using the **All-on-4® Hybrid Concept**

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References

1. Davó R. Zygomatic implants placed with a two-stage procedure: a 5-year retrospective study. *Eur J Oral Implantol* 2009; 2:115–124.
2. Bedrossian E. Rehabilitation of the edentulous maxilla with the zygoma concept: a 7-year prospective study. *Int J Oral Maxillofac Implants* 2010; 25:1213–1221.
3. Esposito M, Worthington HV, Coulthard P. Interventions for replacing missing teeth: dental implants in the zygomatic bone for rehabilitation of the severely deficient edentulous maxilla. *Cochrane Database Syst Rev* 2005; (4): CD004151.
4. Chrcanovic B.R, Abreu M.H.N.G. Survival, and complications of zygomatic implants: A systematic review. *Oral Maxillofac. Surg.* 2013, 17, 81–93. [CrossRef]
5. Davó R, Felice P, Pistilli R, Barausse C, Marti-Pages C, Ferrer-Fuertes A, Ippolito D.R, Esposito M. Immediately loaded zygomatic implants vs conventional dental implants in augmented atrophic maxillae: 1-year post-loading results from a multicentre randomised controlled trial. *Eur. J. Oral Implantol.* 2018, 11, 145–161. [PubMed]
6. Malo P, Nobre M, Lopes I. A new approach to rehabilitate the severely atrophic maxilla using extramaxillary anchored implants in immediate function: a pilot study. *J Prosthet Dent* 2008; 100:354–366.
7. Davó R, Malevez C, López-Orellana C, Pastor-Beviá F, Rojas J. Sinus reactions to immediately loaded zygoma implants: a clinical and radiological study. *Eur J Oral Implantol* 2008; 1:53–60.
8. Pi Urgell J, Revilla Gutiérrez V, Gay Escoda CG. Rehabilitation of atrophic maxilla: a review of 101 zygomatic implants. *Med Oral Patol Oral Cir Bucal* 2008; 13:E363–E370.
9. Davó R, Malevez C, Rojas J, Rodríguez J, Regolf J. Clinical outcome of 42 patients treated with 81 immediately loaded zygomatic implants: a 12- to 42-month retrospective study. *Eur J Oral Implantol* 2008; 1:141–150.
10. Aparicio C, Ouazzani W, Garcia R, Arevalo X, Muela R, Fortes V. A prospective clinical study on titanium implants in the zygomatic arch for prosthetic rehabilitation of the atrophic edentulous maxilla with a follow-up of 6 months to 5 years. *Clin Implant Dent Relat Res* 2006; 8:114–122.

11. Aparicio C, Ouazzani W, Aparicio A, et al. Immediate/early loading of zygomatic implants: clinical experiences after 2 to 5 years of follow-up. *Clin Implant Dent Relat Res* 2010; 12:e77–e82.
12. Kahnberg KE, Henry PJ, Hirsch JM, et al. Clinical evaluation of the zygoma implant: 3-year follow-up at 16 clinics. *J Oral Maxillofac Surg* 2007; 65:2033–2038.
13. Bothur S, Garsten M. Initial speech problems in patients treated with multiple zygomatic implants. *Int J Oral Maxillofac Implants* 2010; 25:379–384.
14. Stella JP, Warner MR. Sinus slot technique for simplification and improved orientation of zygomaticus dental implants: a technical note. *Int J Oral Maxillofac Implants* 2000; 15: 889–893.
15. Zwahlen RA, Grätz KW, Oechslin CK, Studer SP. Survival rate of zygomatic implants in atrophic or partially resected maxillae prior to functional loading: a retrospective clinical report. *Int J Oral Maxillofac Implants* 2006; 21:413-20.
16. Regezi JA, Sciubba JJ, Jordan RC. *Oral pathology: clinical pathologic correlations*. 4th ed. Saunders; 2003.
17. Lopes A, de Araújo Nobre M, Ferro A, Moura Guedes C, Almeida R, Nunes M. Zygomatic Implants Placed in Immediate Function through Extra-Maxillary Surgical Technique and 45 to 60 Degrees Angulated Abutments for Full-Arch Rehabilitation of Extremely Atrophic Maxillae: Short-Term Outcome of a Retrospective Cohort. *J Clin Med*. 2021 Aug 16;10(16):3600. doi: 10.3390/jcm10163600. PMID: 34441896; PMCID: PMC8397045.
18. Maló P, Rangert B, Nobre M. All-on-4 immediate-function concept with Brånemark System implants for completely edentulous maxillae: a 1-year retrospective clinical study. *Clin Implant Dent Relat Res* 2005;7 Suppl 1: S88-94.
19. Maló P, de Araújo Nobre M, Lopes A, Moss SM, Molina GJ. A longitudinal study of the survival of All-on-4 implants in the mandible with up to 10 years of follow-up. *J Am Dent Assoc* 2011; 142:310-20.
20. Rigolizzo MB, Camilli JA, Francischone CE, Padovani CR, Brånemark PI. Zygomatic bone: anatomic bases for osseointegrated implant anchorage. *Int J Oral Maxillofac Implants* 2005; 20:441-7.