

Comparison of the outcomes of guided implant placement between experienced and novice users

A safe and predictable treatment option for experts and beginners

MARCO TALLARICO, MATTEO MARTINOLLI, METODI ABADZHIEV, FABIO COCCHI, YONG-JIN KIM

Literature

1. Verstreken, K., Van Cleynenbreugel, J., Marchal, G., Naert, I., Suetens, P. & van Steenberghe, D. (1996) Computer assisted planning of oral implant surgery: a three-dimensional approach. *International Journal of Oral & Maxillofacial Implants* 11: 806–810.
2. Verstreken, K., Van Cleynenbreugel, J., Martens, K., Marchal, G., van Steenberghe, D. & Suetens, P. (1998) An image-guided planning system for endosseous oral implants. *IEEE Transactions on Medical Imaging* 17: 842–852.
3. Jacobs, R., Adriansens, A., Verstreken, K., Suetens, P. & van Steenberghe, D. (1999) Predictability of a three dimensional planning system for oral implant surgery. *Dento Maxillo Facial Radiology* 28 : 105–111.
4. Guerrero, M.E., Jacobs, R., Loubele, M., Schutyser, F., Suetens, P. & van Steenberghe, D. (2006) State-of-the-art on cone beam CT imaging for pre-operative planning of implant placement. *Clinical Oral Investigations* 10:1–7.
5. Loubele, M., Maes, F., Jacobs, R., van Steenberghe, D., White, S.C. & Suetens, P. (2008) Comparative study of image quality for MSCT and CBCT scanners for dentomaxillofacial radiology applications. *Radiation Protection Dosimetry* 129: 222–226.
6. Jacobs, R. & Quirynen, M. (2014) Dental cone beam CT : justification for use in planning oral implant placement. *Periodontology* 2000 66: 203–213.
7. Vercruyssen M, Laleman I, Jacobs R, Quirynen M. Computer-supported implant planning and guided surgery: a narrative review. *Clin. Oral Impl. Res.* 26 (Suppl. 11), 2015, 69–76
8. Pozzi, A., Tallarico, M., Marchetti, M., Scarfo, B. & Esposito M. (2014) Computer-guided versus free-hand placement of immediately loaded dental implants: 1-year post-loading results of a multicentre randomised controlled trial. *European Journal of Oral Implantology* 7: 229–242.
9. Vermeulen, J. (2016) The Accuracy of Implant Placement by Experienced Surgeons: Guided vs Freehand Approach in a Simulated Plastic Model. *International Journal of Oral & Maxillofacial Implants* 32: 617–624.
10. D'haese J, Ackhurst J, Wismeijer D, De Bruyn H, Tahmaseb A. Current state of the art of computer-guided implant surgery. *Periodontol* 2000. 2017 Feb;73(1):121-133. doi: 10.1111/prd.12175. Review.
11. Fernández-Gil Á, Gil HS, Velasco MG, Moreno Vázquez JC. An In Vitro Model to Evaluate the Accuracy of Guided Implant Placement Based on the Surgeon's Experience. *Int J Oral Maxillofac Implants.* 2017 May/Jun;32(3):151-154.
12. Tahmaseb A, Wismeijer D, Coucke W, Derksen W. Computer technology applications in surgical implant dentistry: a systematic review. *Int J Oral Maxillofac Implants* 2014;29:25–42.
13. Valente F, Schirolli G, Sbrenna A. Accuracy of computer-aided oral implant surgery: A clinical and radiographic study. *Int J Oral Maxillofac Implants* 2009;24:234–242.
14. Colombo M, Mangano C, Mijiritsky E, Krebs M, Hauschild U, Fortin T. Clinical applications and effectiveness of guided implant surgery: a critical review based on randomized controlled trials. *BMC Oral Health.* 2017 Dec 13;17(1):150.