

6th World Congress on *Dentistry and Oral Health*

July 09-10, 2026 | Frankfurt, Germany



Dr Lari Sapoznikov

private clinic in Tel Aviv Israel, Israel

A novel porcine dentin derived bone graft material provides effective site stability for implant placement after tooth extraction: a randomized controlled clinical trial

Introduction

The objective of this clinical study was the assessment of the clinical performance of a porcine dentin-derived particulate bone graft material for bone regeneration after tooth extraction with implant placement at 4 months, in comparison to a commercially available porcine bone-derived graft.

Methods

The study was a randomized, parallel group, semi double-blinded clinical trial. Primary endpoints were the extent of new bone growth and bone-graft integration at 4 months.

Results

The dentin graft material had statistically significantly more new bone formation (60.75% vs 42.81%, $p=0.0084$, $N=20$ vs 16), better bone-graft integration scores (good integration in 85% vs 40%, $p=0.0066$) and higher mean radiodensity of the bone (981.5HU vs 727.7HU, $p=0.0011$) at the graft site compared to the bone-derived material. The mean implant insertion torque force was similar for the dentin and bone materials (34.75Ncm vs 34.06Ncm). Titanium implant placement was successful in 95% of patients with the dentin graft material compared to 81.25% for the bone graft. Both materials had similar clinical safety and tolerability as determined by adverse events and local site reactions. Physician assessed ease of grafting and ease of implant placement on a 10-point scale showed no statistical differences (8.78 vs 8.27, $p=0.2355$; 8.05 vs 8.75, $p=0.1118$, respectively).

Conclusion

It was therefore demonstrated that Ivory Dentin Graft™ has clinical safety, tolerability and performance for implant placement at 4 months after tooth extraction at least as good as a commercial bone-derived material. The availability of porcine dentin-derived bone graft material allows wider use of dentin-derived material which has so far only been available in the form of autologous dentin from the patient's own teeth.

Biography

Dr Lari Sapoznikov has been running a private clinic in Tel Aviv Israel with emphasis on implantology and prosthodontics since 1992. He is a Member of IAOI (Israeli association of oral implantology), GAOI (German association of oral implantology), Fellow of ICOI (International Congress of oral implantology), MFDI (Member of the faculty of dentistry of the Royal College of Surgeons in Ireland, England and Scotland) and a Specialist in Basal Implantology at the University of Nice, France. He is the inventor of the "Smart Dentin Grinder" which allows chairside processing of the patient's own teeth to provide autologous dentin particles for bone grafting. He has established the company Ivory Graft Ltd. to extend the availability of dentin-derived material for clinical use.