



Dr. Rafał Mędzin is a lecturer and trainer in cosmetic dentistry, aesthetic restorative techniques and dental photography, as well as a consultant in product development and clinical research. He obtained his dental degree in 1996 at the Pomeranian Medical Academy, Faculty of Dentistry, in Szczecin, Poland. In 1999 he earned Postgraduate Specialisation in General Dentistry and in 2012 graduated Postgraduate Curriculum of Oral Implantology at the JW Goethe University in Frankfurt, Germany.

Together with his wife and father, Dr Mędzin runs the Dentura Clinic and Lab in the city of Gryfino, Poland.

Dr Medzin is specialised in aesthetics and prosthetic rehabilitation on natural teeth and implants, as well as minimally invasive dentistry, CAD/CAM technologies and dental macro photography. In 2011 he achieved a world first when he gave a dental presentation in real 3D in Warsaw, on the biggest 3D 4K cinema screen in Europe.

His main interests outside of dentistry are martial arts and shooting. He holds a 1st dan black belt in aikido and is a certified ISSF sport-shooting instructor.

Indirect composite restorations in the posterior zone: probably one of the best options

Clinical step-by-step with GRADIA® PLUS composite, luted with G-CEM LinkForce™

By Dr. Rafał Mędzin, Poland

In spite of the many advantages that ceramic restorations have to offer, they have some drawbacks as well, such as wear of the antagonist and brittle catastrophic failures. That is why, for some particular cases, indirect composite restorations are preferred. High-strength indirect composites have the advantage of inducing less marginal chipping of the enamel around the margins of the restoration and they have better long-term stability on margins. According to available studies, indirect overlay composite restorations also exhibit better fatigue resistance and fracture propagation of posterior endodontically treated teeth^{1,2}.

With indirect composite restorations, the enamel wear rate and total wear rate are more favourable than with ceramic restorations³. Moreover, composite restorations on implants present similar dynamic responses to load (damping behaviour) when compared to natural teeth using a simulated periodontal ligament⁴ and they showed significant higher survival rate when compared to ceramic onlays and crowns in clinical trials⁵. We have been using composites for those cases more than 10 years long with really satisfactory results.

1. P Magne, A Knezevic. Influence of overlay restorative materials and load on the fatigue resistance of endodontically treated molars. Quintessence Int. 2009 Oct;40(9):729-37.
2. P Magne. Virtual prototyping of adhesively restored, endodontically treated molars. J Prosthet Dent. 2010 Jun;103(6):343-51.
3. KH Kunzelmann, B Jelen, A Mehl, R Hickel. Wear evaluation of MZ100 compared to ceramic CAD/CAM materials. Int J Comput Dent. 2001 Jul;4(3):171-84.
4. P Magne, M Silva, E Oderich, LL Boff, R Enciso. Damping behavior of implant-supported restorations. Clin Oral Implants Res. 2013 Feb;24(2):143-8.
5. E Oderich, LL Boff, AA Cardoso, P Magne. Fatigue resistance and failure mode of adhesively restored custom implant zirconia abutments. Clin Oral Implants Res. 2012 Dec;23(12):1360-8.
6. GH Lombardo, CF Carvalho, G Galhano, RO Souza, CA Panavelli. Influence of additional polymerization in the microhardness of direct composite resins. Cienc Odontol Bras. 2007 Apr; 10 (2): 10-15.



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