

Hinweis in eigener Sache

Auf den folgenden Seiten finden Sie eine Studie über das Keramik-Implantat **ZV3**. Dieses Implantat wird seit 2018 von uns, Champions-Implants GmbH, unter dem Produktnamen **BioWin!** vertrieben. Wir weisen daraufhin, dass dieses Implantat völlig identisch mit dem in der Studie erwähnten Implantat ist – inkl. der Produktion und dem Zubehör.



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A clinical, radiographical and microbiological evaluation up to 5 years. Manuscript accepted for publication.

Investigators

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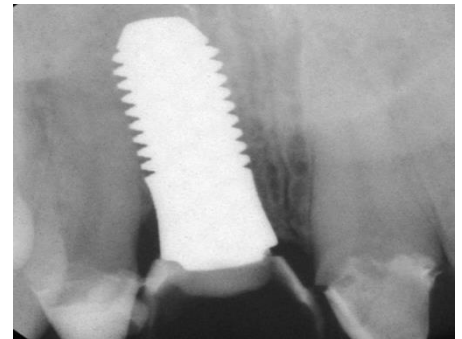
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Aim of the Study

To evaluate the clinical performance of **ZV3** implants zirconia endosseous implants in a retrospective study. 2004-2011



Study Design at a Glance

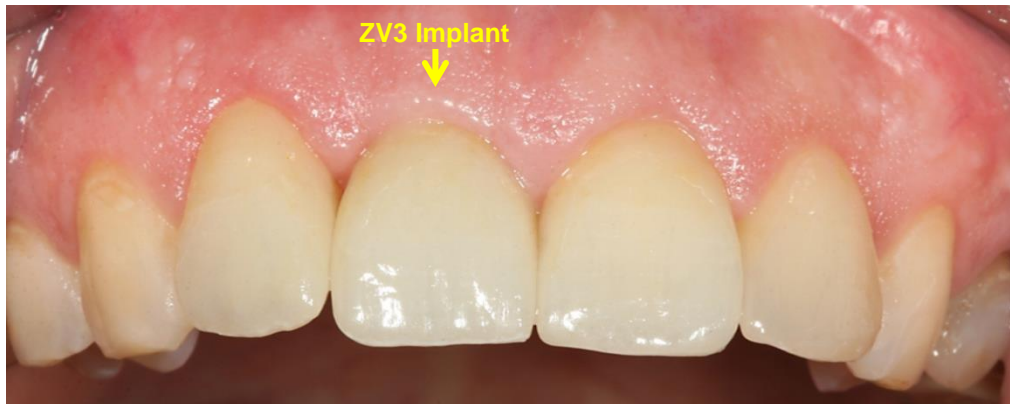
157 patients (n=316 implants) consecutively treated patients were studied through chart review and clinical examination. Full mouth Probing Pocket Depth (PPD) and percentage Bleeding on Probing (BOP) around teeth and implant(s) were assessed and compared. Marginal bone loss/gain relative to baseline was measured on intraoral radiographs and the prevalence and quantities of 7 periodontal bacteria were assessed around implants and teeth in the same patient.



Results

Survival Rate: Two piece Implants survival rate is 96.9% (SD 2,2%) after 5 years. Two piece implants were only lost caused by a lack of primary stability. After successful osseointegration no losses were observed.

Clinical Parameters: Surviving implants demonstrated healthy mucosal conditions with low mean PPD's (1.7 mm, s.d. 0.4) and mean BOP (3.7%, SD 5.4%). PPD and BOP were statistically significantly lower in implants than in teeth. BOP as well as PPD around implants and teeth correlated significantly ($r=0.56$, $p<0.001$; $r=0.51$, $p<0.001$); Stable marginal bone levels were observed with a mean of 0.0 mm (SD 0.4 mm) bone loss after 5 years. Bacterial counts were consistently lower on teeth than on implants, although not to a statistically significant level.



Mean marginal bone loss on 2-piece implants since implant placement in millimeters after consecutive years.

	Overall	1 year	2 year	3 year	4 year	5 year	ANOVA
	n=149	n=15	n=33	n=41	n=45	n=15	F=0.37
Bone loss in mm (s.d.)	0.0 (0.52)	0.2 (0.7)	-0.0 (0.3)	0.0 (0.6)	0.0 (0.6)	0.0 (0.4)	p=0.83
Range	2.0 - -1.6	2.0 - -0.9	0.9 - -0.9	1.6 - -1.6	1.7 - -0.9	0.8 - -0.7	

Conclusions from Report

ZV3 zirconia endosseous implants can achieve a 5-year implant survival rate in partially edentulous patients, similar to that of titanium implants, with more healthy and more stable soft and hard tissues.

Related Clinical Evaluations

Borgonovo, A., Censi, R., Dolci, M., Vavassori, V., Bianchi, A. & Maiorana, C. (2011). Use of endosseous one-piece yttrium-stabilized zirconia dental implants in premolar region: a two-year clinical preliminary re-port. *Minerva Stomatol* **60**: 229-242

Depprich, R., Zipprich, H., Ommerborn, M., Naujoks, C., Wiesmann, H.P., Kiattavorncharoen, S., Lauer, H.C., Meyer, U., Kubler, N.R. & Handschel, J. (2008c). Osseointegration of zirconia implants compared with titanium: an in vivo study. *Head & Face Medicine* **4**: 30

Koch, F.P., Weng, D., Kramer, S., Biesterfeld, S., Jahn-Eimermacher, A. & Wagner, W. (2010). Osseointegration of one-piece zirconia implants compared with a titanium implant of identical design: a histomorphometric study in the dog. *Clinical Oral Implants Research* **21**: 350-356.