

## **Media information**

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### **Berne's dental professionals prove reliability of implants**

**Researchers at the School of Dental Medicine (ZMK) in Berne have shown in an extensive long-term study that very few complications arise in the routine treatment of dental implants, and that the risk for patients is therefore low.**

Dental implants are highly valuable for patients: in the event of tooth loss they help to re-establish the ability to chew and a person's appearance, and are gentler on the teeth than bridges, which require the filing of healthy tooth substance. Major progress was made in implantology from the mid-1980s to the end of the 1990s, with the procedure since having become routine. In order to assess the reliability of these dental implants, a group of researchers at the School of Dental Medicine (ZMK) in Berne carried out a long-term study that has now been published in the leading international journal "Clinical Implant Dentistry and Related Research". The ZMK study shows that treatment with dental implants demonstrates a high level of reliability with a low complication rate.

#### **Risk of implant loss is low**

The 10-year study involved more than 300 patients who had experienced tooth loss and received one or more implants (511 in total) at the end of the 1990s. The implants used were made of titanium, with a micro-rough surface that was new at the time but is still in use today.

Follow-up checks with these patients revealed that over this period only 6 of the implants had not held, which corresponds to a loss rate of 1.2 percent. A further 1.8 percent of the implants were the cause of a biological complication in the form of an infection during this period. "The results exceeded our already optimistic expectations," says Daniel Buser, Director of the Department of Oral Surgery and Stomatology, who carried out the study together with Giovanni Salvi, Deputy Director of the Department of Periodontology, and Urs Brägger, Head of the Department of Crown and Bridge Prosthetics. "Figures like these are important for us to be able to present patients with the risks."

Daniel Buser emphasizes that the study was carried out under strict conditions, with only evidence-based treatment methods and well-documented implants being used, and with most patients practicing good oral hygiene and paying regular visits to a dental hygienist. In addition, the implant surgeons involved were well-trained and had extensive clinical experience. "These are all factors that favor good long-term results with dental implants," says Buser.

#### **Berne's dental professionals lead the way worldwide**

The Berne School of Dental Medicine has been active in the area of dental implantology for around 40 years, and is today one of the world's leading centers of competence in this important area of dental medicine. The School's activities comprise not only a high level of preclinical and clinical research activity, but also the treatment of around 1,000 implant patients per year. In addition, the ZMK regularly organizes internationally advertised training courses and implant conferences.

**Bibliographic details:**

Daniel Buser, Simone F. M. Janner, Julia-Gabriela Wittneben, Urs Brägger, Christoph A. Ramseier, Giovanni E. Salvi: *10-Year Survival and Success Rates of 511 Titanium Implants with a Sandblasted and Acid-Etched Surface: A Retrospective Study in 303 Partially Edentulous Patients*, Clinical Implant Dentistry and Related Research, December 2012, DOI: 10.1111/j.1708-8208.2012.00456.x

**Contact person:**

Prof. Daniel Buser  
Department of Oral Surgery and Stomatology  
The School of Dental Medicine of the University of Berne  
Freiburgstrasse 7, 3010 Berne  
Tel. +41 (0)31 632 25 63 / +41 (0)79 476 42 25  
[daniel.buser@zmk.unibe.ch](mailto:daniel.buser@zmk.unibe.ch)

Communication department  
Hochschulstrasse 4  
CH-3012 Berne  
Tel. +41 031 631 80 44  
Fax +41 031 631 45 62  
[kommunikation@unibe.ch](mailto:kommunikation@unibe.ch)  
[www.kommunikation.unibe.ch](http://www.kommunikation.unibe.ch)