

„Keep It Safe & Simple“

For almost two decades, MIMI[®], the Minimally Invasive Method of Implantation, has been known as a beneficial, patient-friendly and periosteum-protecting surgery surgical method. (Don't confuse the MIMI[®] method with Mini implants, which are made from titanium, grade 5, and have an implant diameter that is smaller than 2.9 mm). The Champions[®] implant system, which is inserted according to MIMI[®], has been very successful in recent years. However, this implant system can also be inserted according to the classical implantation method, and if necessary, augmentations can be performed. The implants themselves are made from titanium, grade 4, by a well-known German manufacturer. The surface of the Champions[®] are made from the best material on the market, according to several studies in Germany, for example at the university clinic in Cologne, and the United States.

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(Translation: Celina Jelonek)

* Please note: The tooth numbers mentioned refer to the FDI Notation System (Dental Chart/Two-Digit World Dental Federation Notation)

The principle of Champions[®] is: „KISS“ Keep It Safe & Simple! Last year, more than 50 000 Champions[®] implants were inserted in German dental clinics/offices. The Champions[®] implants have proven to be reliable and beneficial. Their price-performance ratio and innovative features (such as the cementable „Prep-Caps“ and the two-piece Champions (R)Evolution[®] implants), as well as the efficient surgical and prosthodontic procedures they employ, are unbeatable.

Primary stability at a torque of 40 Ncm can be achieved with a one-piece 3.5 mm-diameter „Classic“ Champions[®] implant (slightly conical end), with the 3.0 mm-diameter „New Art“ Champions[®] or with 3.5 mm-diameter two-piece Champions (R)Evolution[®] implants. Implants with a larger diameter (approx 4.5 mm or 5.5 mm) should only be used if primary stability of the 3.0 mm-diameter condensers or of the mentioned implants cannot be achieved at 30/40 Ncm.

According to recent clinical studies, the old argument, „The more titanium in the bone, the better it is“, has been proven wrong. In fact, the peri-implant nutrition plays a major role. There are very few complications associated with the MIMI[®] treatment, which is very beneficial for patients: thanks to MIMI[®], the periosteum, which nourishes the bone, is very well protected.

In some cases, you can extract teeth that cannot be periodontally preserved and insert implants in the same session. Patients with one-piece Champions[®] implants, for example for single front teeth, are provided with a fixed temporary restoration before the final prosthodontic restoration is fitted 8 weeks after implantation. If there are more than four fixed teeth/implants, the final prosthodontic restoration can even be fitted within the first 14 days post surgery and splinted/passively fitted (e.g. with Implantlink Semi). In the 2-8 weeks post surgery, the one-piece

implants must be stabilized against micro-movements in order to ensure the transition from Primary Osseointegration Stability (POS) to Secondary Osseointegration Stability (SOS). This phase is very critical: when fitting fixed prosthodontic restorations, the temporary restorations should not be removed in the 2nd to 8 weeks post surgery. When two-piece Champions (R)Evolution[®] implants are inserted, the implants can be transferred to Secondary Osseointegration Stability independently from temporary restorations without any problems. Two-piece Champions (R)Evolution[®] implants are indicated for smaller units (1-3 teeth), and one-piece Champions[®] are indicated for larger units (4 or more implants/teeth). Dental surgeons prefer to work with two-piece Champions (R)Evolution[®] implants since they can avoid many of the problems associated with temporary restorations. The whole treatment (without the need of special high-tech material) is easily affordable for most patients.

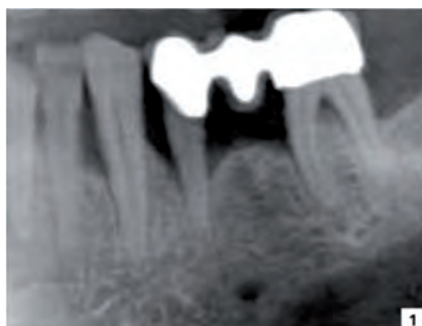


Fig. 1-3: Case Study: Tooth 34 and tooth 36 of the 50-year-old patient could not be preserved. After local anesthesia, the teeth were gently extracted, and one-piece Champions[®] were inserted. You can see the bone „plateau“ between the previous tooth roots in the bifurcation area. This type of immediate implantation has many advantages, just one surgery session is necessary, and in the long-term, there is no loss of soft or hard tissue.

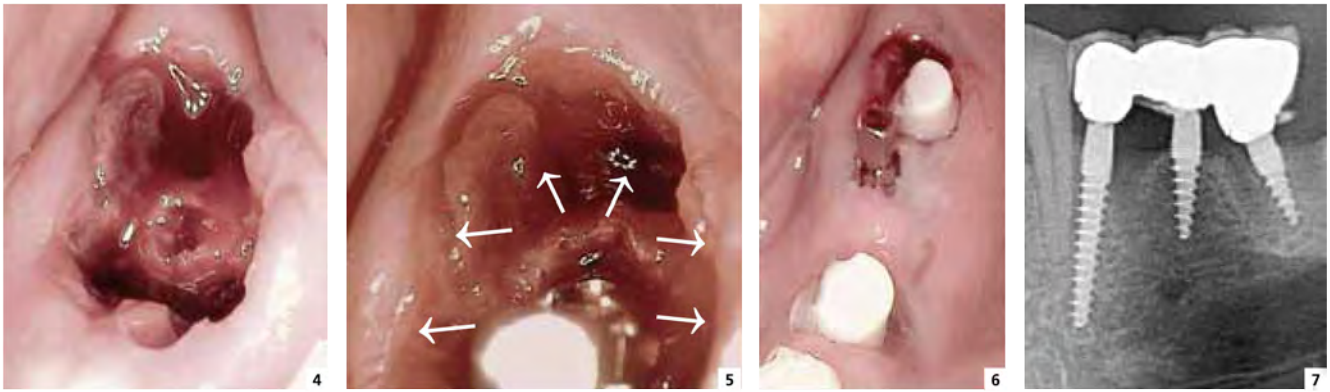


Fig. 4-7: With the bone condensing conical triangular drills, we prepared the bone cavity, in which the implant was inserted at approximately 40-60 Ncm (arrows). The implant served as an osteotome, allowing bone to be laterally condensed. Following the immediate implantation, zircon Prep-Caps were cemented approximately 1-2 mm subgingivally. Combined with hyaluronic acid gel and malleable and resorbable collagen, Prep-Caps ensured optimal GTR (Guided Tissue Regeneration). After 8 weeks, we temporarily cemented the final crowns (Fig. 7).

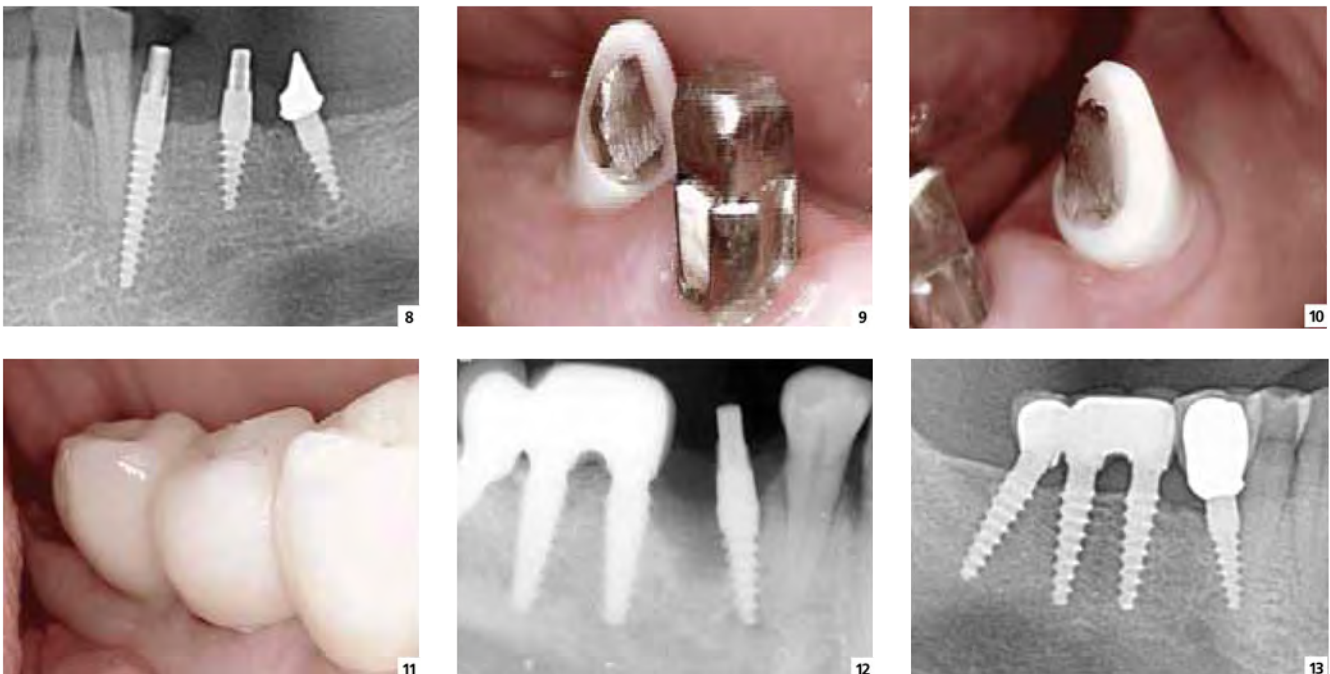


Fig. 8-13: The Fig. 8, 9, 10 and 13 show the complete bone and tissue regeneration, comparing the day when the bridge was fitted (Fig. 7) eight weeks post surgery with the day of the implantation (Fig. 6 and 12) approximately a year before. After checking the implant sites, we fitted the ceramic crowns (website for patients: www.mimi-info.com). Fig. 12 shows the implant immediately achieving primary stability in region 45. The crown 45 was fitted eight weeks after the implantation. Fig. 13 shows the complete bone regeneration a year post surgery! The implants in regions 46 and 47 were placed and restored in 1997.

While previous theses argued that implants should always have an inter-implantary distance of 2-3 mm or of 2-3 mm to adjacent teeth, this has been proven wrong by hundreds of studies and long-term documented cases. When the implants have achieved primary stability, bone does not have to first grow on the titanium. Thanks to the MIMI® technique, bone remains well-nourished. Therefore, you only need an inter-implantary distance of 1 mm and a distance of 1 mm to the adjacent teeth.

Patients need to be well informed about all aspects of implant treatment, including the benefits of one-piece implants for single tooth gaps. Temporary restorations and cements should be fitted to avoid lateral shear forces and micro-movements in the first 2 to 8 weeks post surgery, and patients should be aware of the importance of their compliance with their dentist's instructions.

The case described is an example of how successful and reliable immediate implantation can be if special techniques and materials, which protect the periosteum, are applied.

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