

Technical Information Bulletin

Immediate restoration of Z-Systems Zirkolith® ceramic implants with SLM® surface (Z5m)

Internal study, Dr. Ralf Luettmann (July 2013)

Patients prefer the shortest possible treatment times, ideally they would like to have their "new teeth" immediately after surgery. Due to state-of-the-art materials and techniques, the concept of immediate restoration with implants can satisfy this need to some extent.

Requirements for immediate restoration

- Dentists with extensive experience
- Sufficient and healthy available bone
- Minimally invasive surgery without major flap formation
- Preparation of the implant site adapted to the bone quality, if necessary sub-dimensioned with bone condensation (D_3 and D_4)
- High primary stability > 45 (less than 45 Ncm primary stability is a contraindication and non-functional temporary is recommended.)
- Immediate preparation of the implants
- Firmly cemented (i.e. Ketac Cem green) temporary restoration within 48 hrs. bearing in mind an occlusion concept for reducing lateral and occlusal forces
- Avoiding proximal contact to teeth with increased mobility
- Postoperative antibiotic administration for 7 days
- Patient to be advised to prefer soft diet for the first 10 days and to rinse 2x daily with CHF 0.2%
- No manipulation of the implant (such as removing the temporary dentures) within the first 4 weeks post-operatively

Contraindications

- Patients skeptical of this concept, who have previously lost implants or are under age
- General contraindications against oral surgery
- Cancer patients undergoing active irradiation therapy
- Smokers with uncontrolled diabetes (patients not treated for their diabetes)
- Patients with deep bite or bruxism
- Insufficient bone quality or bone volume

Conclusion

With careful planning and good patient selection, Z-Systems Zirkolith® ceramic implants with SLM® surface are a safe treatment option if the dentist commands adequate experience and complies with the requirements and contraindications.















