



## Lecture Abstract

### **Dr. Frank Kornmann, Oppenheim/DE**

Dental Clinic, Oppenheim, Germany;  
Dentist, Oral Surgeon

#### **Main implantological topics:**

- Immediate implantation and immediate loading
- Guided implantation

#### **Professional skills:**

- Oral surgery
- Specialist in implantology

### **Flapless guided surgery and immediate loading with XiVE® implants**

Since dental surgery is based on 2D images, such as the panoramic X-ray, anatomical limitations can make it difficult to determine implant location. As CT-/CBCT-scanners get more affordable, computer enhanced implant planning is getting more interesting for complex implant cases. Surgical templates are linking the virtual treatment plan with the real treatment and also reducing the risk of complications during and post surgery. The ExpertEase™ Software was used to determine the positions for the XiVE® implants in the upper jaw. By using the ExpertEase™ Guide an exact transfer of implant positions to the mouth was possible. The system enables us to place the implants accurately in position, angulation and in depth. With the pre-fabricated temporary bridge it is easy to overcome some differences between implant plan and real implant position. After a period of 4 months "bone training" the definitive bridge replaced the temporary bridge. 4 months after insertion all XiVE® implants were osseointegrated. The postoperative CT scan was matched with the preoperative one to evaluate the deviation between planned and real implant positions. The comparison showed that the implants were inserted in the exact position, as the deviation was smaller than 0,3 mm for each implant. The use of 3D planning software in combination with a CAD/CAM surgical template ensures a safe, precise and predictable implant placement. Flap-free technique keeps the supracrestal vasculature intact resulting in a better nutrition of the bone. This guarantees a high chance of osseointegration in combination with immediate loading.