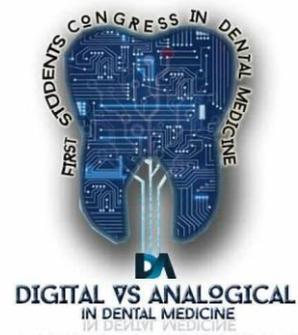




# UNIVERSITY "GOCE DELCEV" – STIP FACULTY OF MEDICAL SCIENCES



FIRST STUDENT'S CONGRESS IN DENTAL MEDICINE  
DIGITAL VS. ANALOGICAL

## IMMEDIATE LOADING OF DENTAL IMPLANTS WITH HYBRID BRIDGE

Author: Prim.d-r. Danilo Krstevski – prosthodontic specialist

d-r. Gjorgi Trajkovski – oral surgery specialist

Coauthors: d-r. Katerina Spasovska – prosthodontic specialist

d-r. Dubravka Angelic – Krstevska – general dentist

Mentor: Prof. d-r Dragoljub Veleski

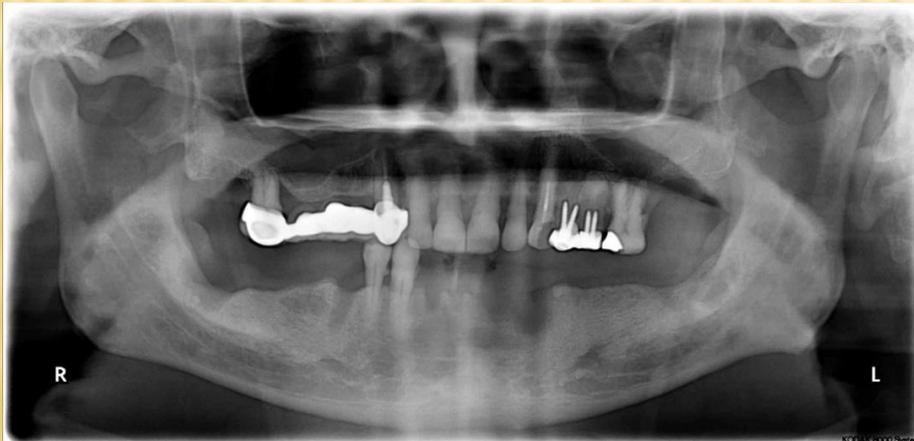
Prof. Dr. Cena Dimova



**In the clinical dental practice, often, we are faced with patients that have very few teeth, or they haven't got any – total tooth loss. The prosthetic is the future of these problems. With its many possibilities, it has a scientific basis to solve all these cases with mobile or fixed prosthodontics. In these cases we're doing reconstruction and rehabilitation of the mouth with prosthodontic appliance in order to make up for the lost teeth and to set up functional and aesthetic harmony of the patient's mouth.**

**The crucial question is the biomechanical loading of the fixed construction, which asks extensive analysis and planning of the case.**

**In advance, we have to keep in mind the action of horizontal and vertical strength. They act like flipping mastication strength and we have to calm and balance them. This is the reason why we need appropriate intermaxillar space splited in equal halves, so we can design the suprastrucute correctly.**



With selective grinding of the antagonists we get the wanted space for the regular position of the teeth.



Planning the suprastructure at this point results in stable and polygonal positioned occlusion with multi – point contacts. This guarantee long lasting of the structure. With these kind of contacts we would get the wanted balanced positioning of the masticatory and non – masticatory forces in wider zones.



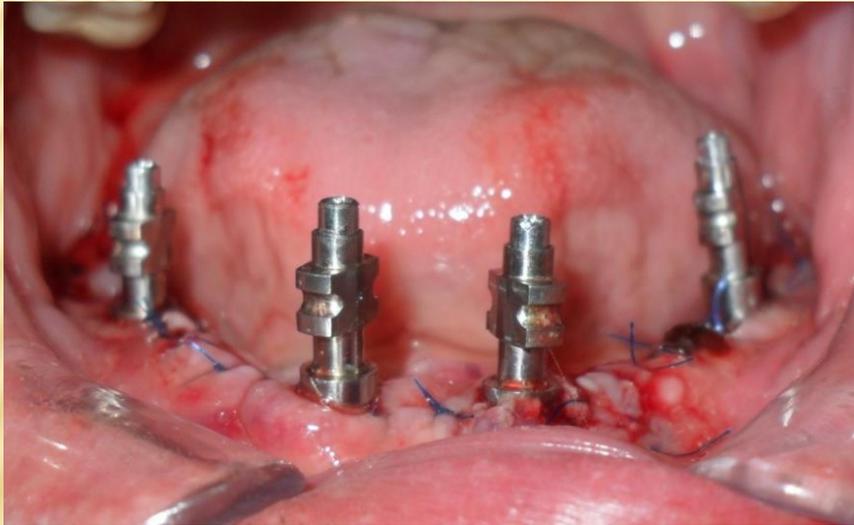
WE USE THE REMAINING TEETH FOR PROSTHETIC  
PLAIN CONTROL



According to the panoramix X-ray images and the studio casts, we are looking for the best static positions for the future 4 implants. The next step is extraction of the hopeless teeth and implantation in the same surgical intervention.



The same day, when the implantation is finished, we are taking one - phase impression with syringe technique, with the principles of the open tray method, so we can start the preparation for the hybrid bridge.



Transfers



Analogs

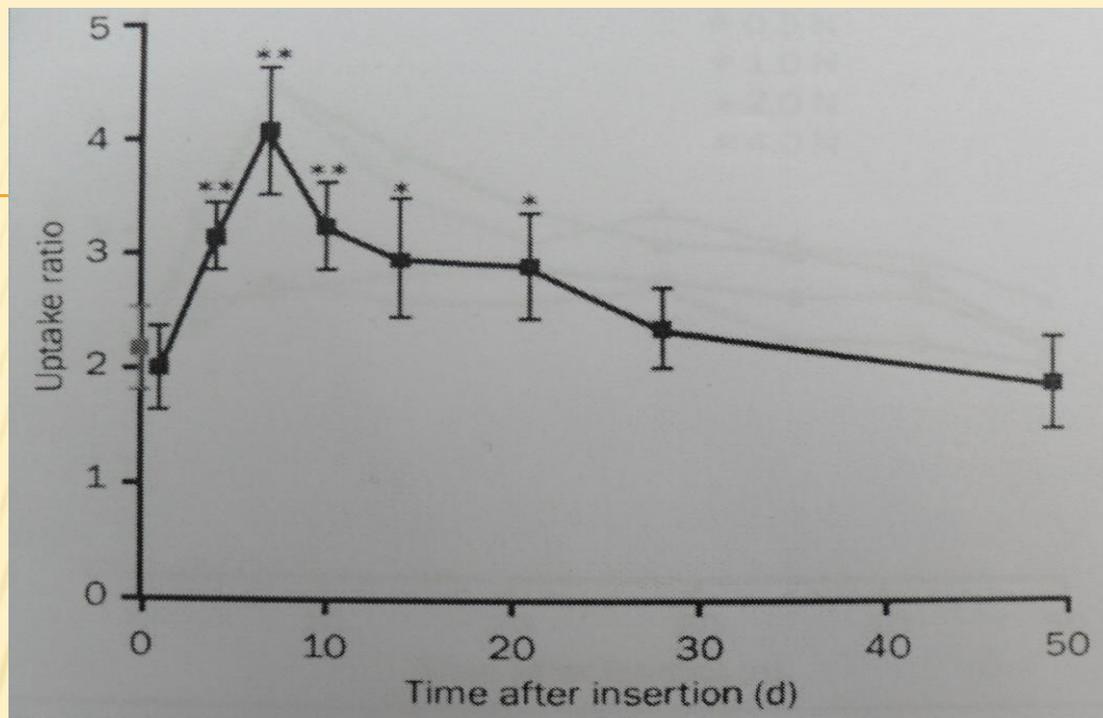
When the impression is taken, we are placing the sulcus formers.



Supportive medication and laser therapy is needed.

# TEETH TEST IN WAX





- ✘ The most optimal is the early or immediate loading of the implants to be done in a period from 48 to 72 hours. This frame can be extended to maximum 168 hours (7 days), but no longer than that. This recommendation is supported with in vivo and in vitro experiments (McCracken et al., 2001) that show that the biggest uptake of necessary minerals on metabolic level are in this specific time interval. After the seventh day, there is rapid decrease of the metabolic processes, so loading after that period will be disaster.

# Hybrid bridge test and its reocclusion



THE STICHES MAY HAVE DELAYED REMOVAL

# FINAL RESULT



For the patients this is a practical and fast transient solution due to the fact that they get teeth immediately. They are filled with spontaneous optimism and totally psychologically dispersed. The transition period until the final design of a definite metal - ceramic bridge can be peacefully extended for a longer time.