Case Report Series

A Staged Full Arch Implant Surgery Approach Without Bone Removal

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The Baseline Situation

Patient with non functional natural tooth crown preparations

A female patient presented for implant consultation with a chief complaint that her recent tooth-borne «crowns and bridges keep falling out». Natural tooth crown preparations were too aggressive and the teeth were lacking retention and resistance forms.

The Treatment Strategy

1 Stage one implant surgery

Strategic tooth extractions

Leaving of key natural tooth abutments to serve as a tooth-borne fixed provisional prosthesis

Placement of 5 implants (3x ELEMENT MC INICELL® [2x PF 5.0, L 9.5 & 1x PF 4.0, L 11]; 2x CONTACT MC INICELL® PF 4.0, L 12.5) with an insertion torque below 25 Ncm

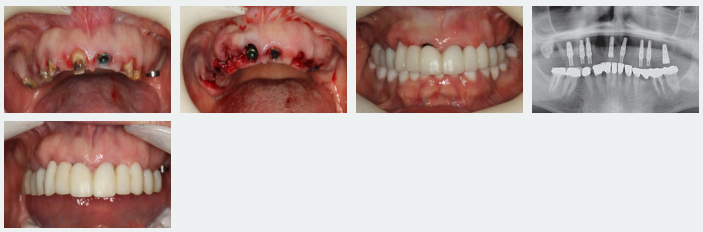
Fabrication and delivery of a tooth-borne fixed provisional prosthesis

2 Stage two implant surgery

After 2.5 months of healing, extraction of natural teeth that had been used as short-term abutments

Placement of additional 3 implants (1x ELEMENT MC INICELL® PF 4.0, L 12.5; 2 x CONTACT MC INICELL® PF 4.0, L 12.5)

Conversion of the stage one provisional prosthesis from tooth-borne to implant-borne

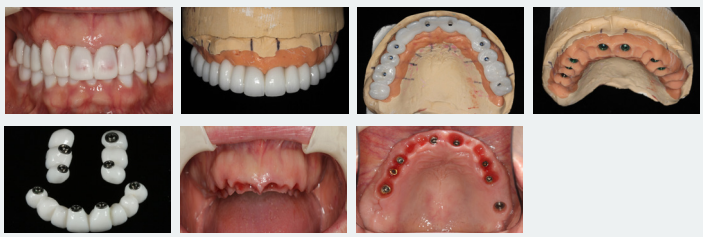


3 Prosthetic treatment

After 2 months of healing, initiation of the final prosthetic phase

Impression taking, recording of jaw relation, wax trying, and laboratory procedures

Fabrication of three, layered-zirconium cemented to titanium bases, screw retained, fixed prostheses



The Outcome

In the presented case, the use of staged, fixed prostheses serves to maintain hard and soft tissue architecture. These results can only be achieved by avoiding bone removal. It is visible that all keratinized tissues including papilla have been maintained. Three month post-op shows healthy tissue with original soft tissue architecture

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