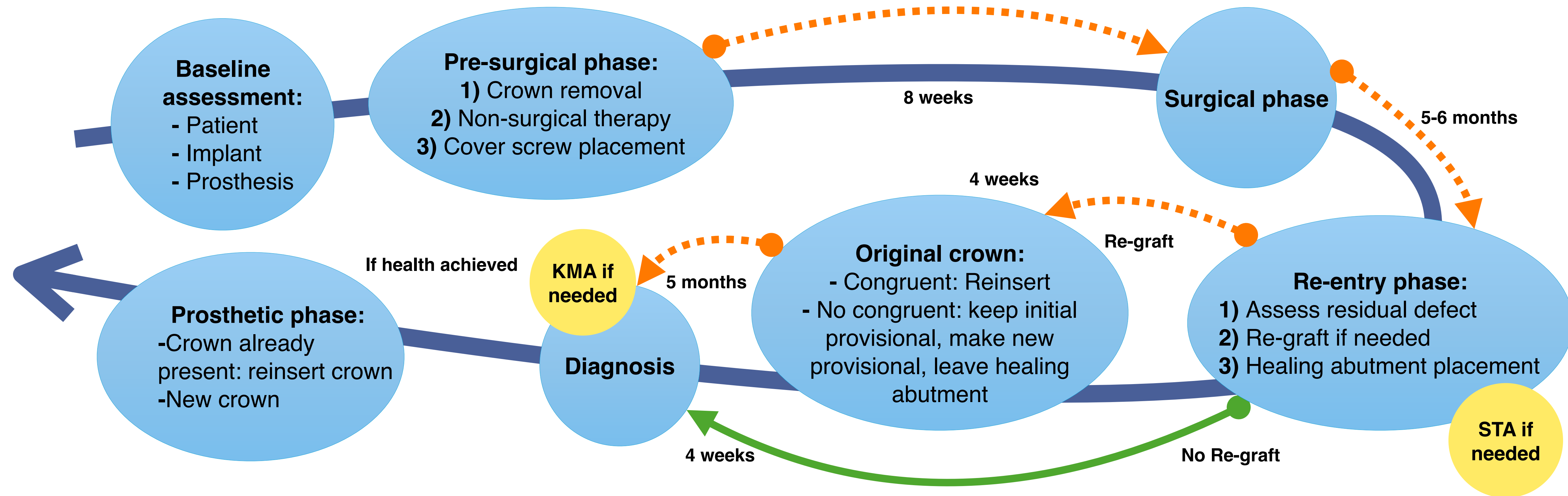


## INTRODUCTION

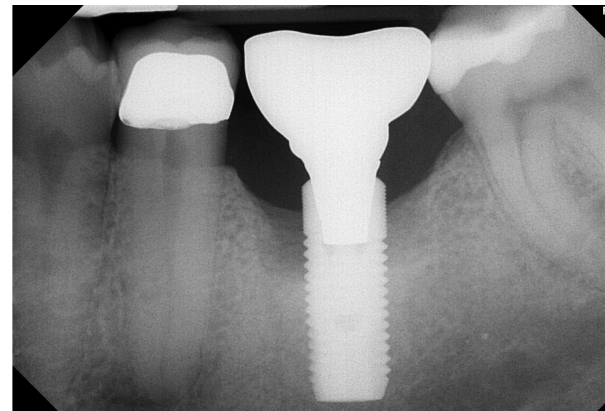
Peri-implantitis is an inflammatory disease initiated by bacterial biofilm which causes bleeding on probing, suppuration, increased probing depth, bone resorption, and ultimately leads to implant loss when untreated. Current treatment approaches, especially regenerative techniques, show variable outcomes due to differences in implant surfaces, defect morphology, and surgical phases to improve regeneration and ensure long-term implant survival through clinical cases with 2-year follow-up.

## METHODS





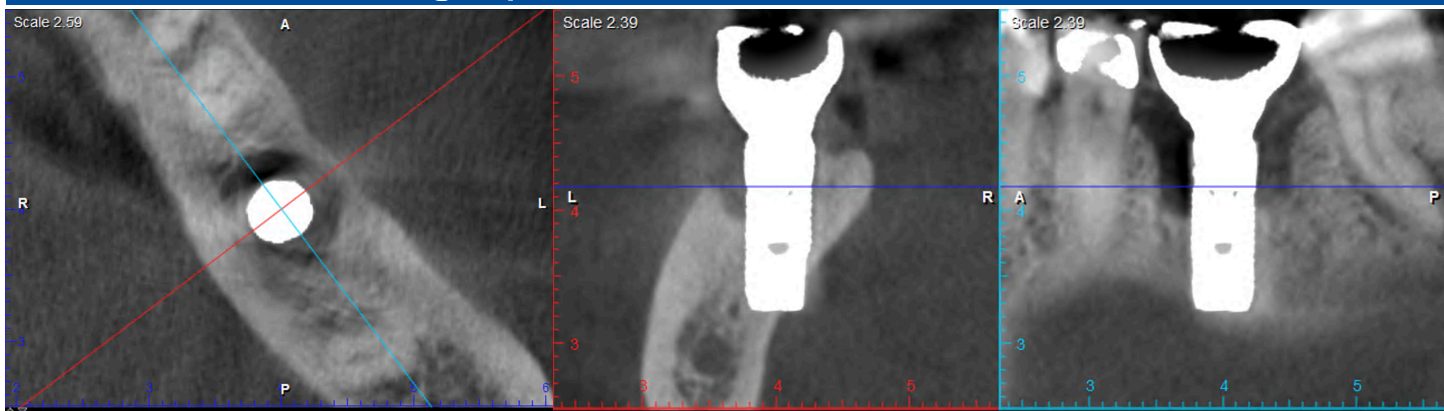
PRE-SURGICAL PHASE



Baseline assessment



Radiographic assessment - 1e defect

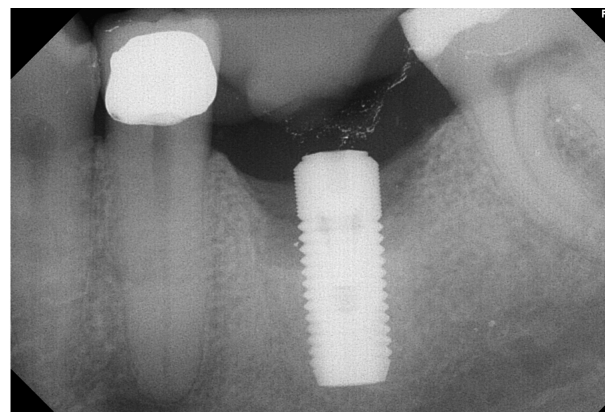


Crown removal



| #19 | MB | B | DB |
|-----|----|---|----|
| PD  | 7  | 8 | 4  |
| BOP | 2  | 0 | 0  |
| SUP | 0  | 1 | 0  |
|     | ML | L | DL |
| PD  | 3  | 5 | 4  |
| BOP | 2  | 0 | 0  |
| SUP | 0  | 0 | 0  |

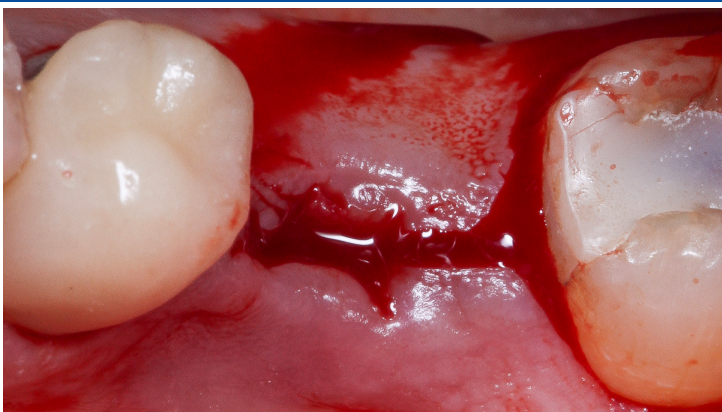
SURGICAL PHASE



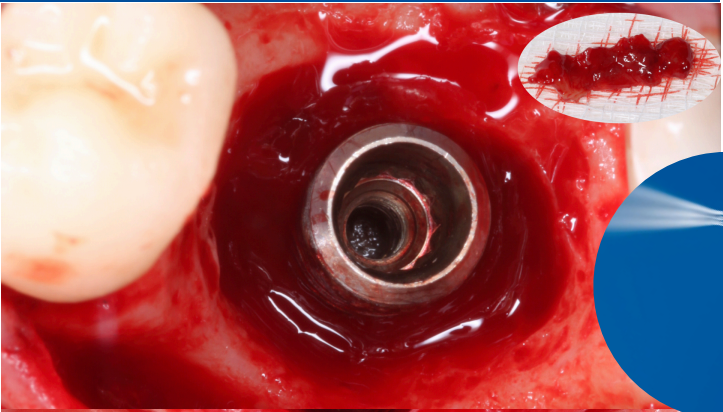
6 weeks



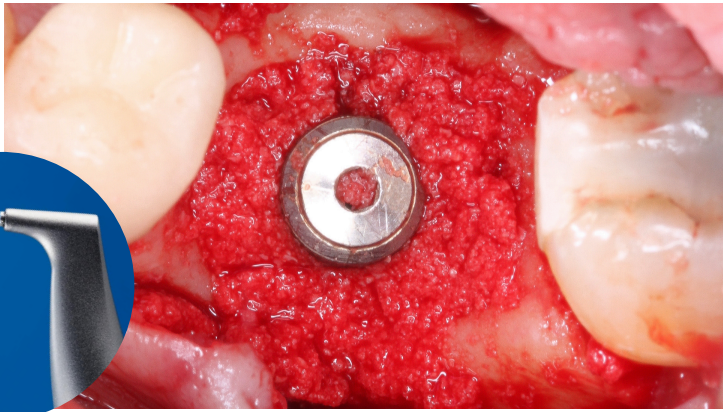
Incision



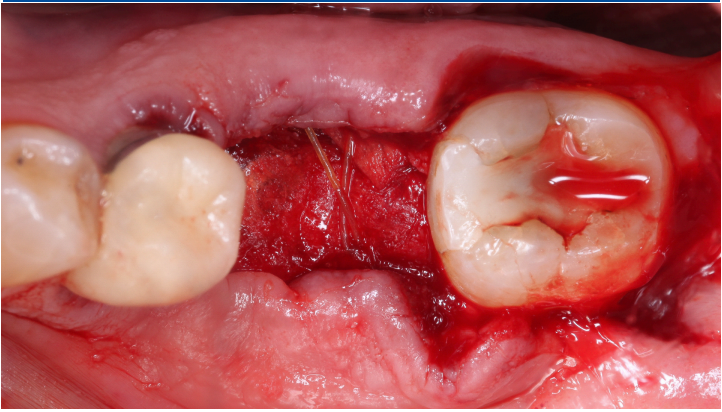
Gran tissue/Decontamination



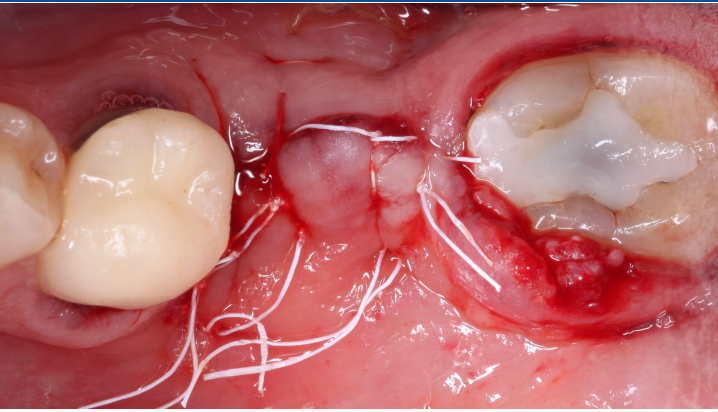
Xenograft + 10% collagen



Collagen membrane - Lasso



Sutures - Submerged



RE-ENTRY PHASE



5 months/Incision



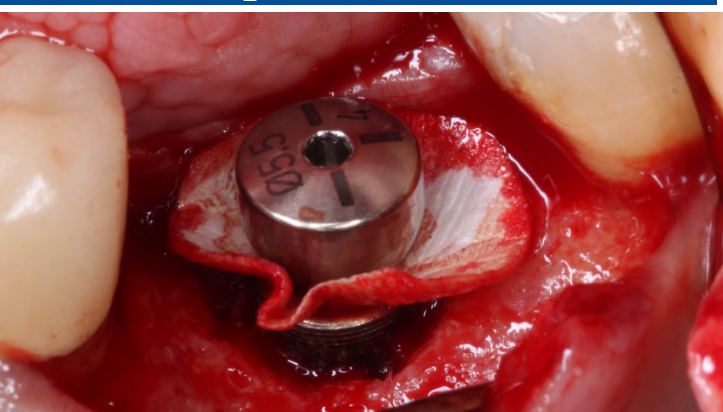
Defect/Decontamination



Poncho technique



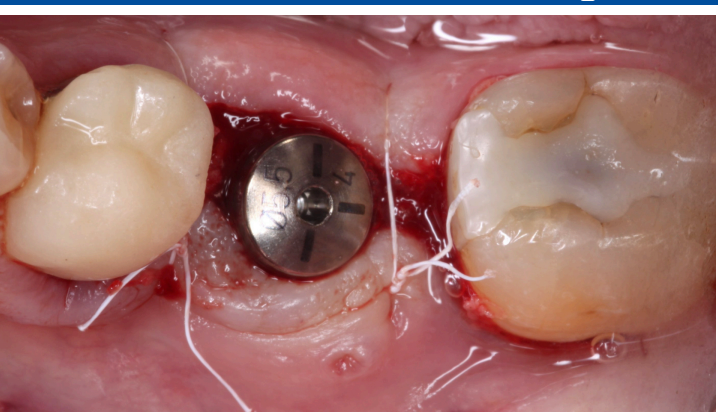
Collagen membrane



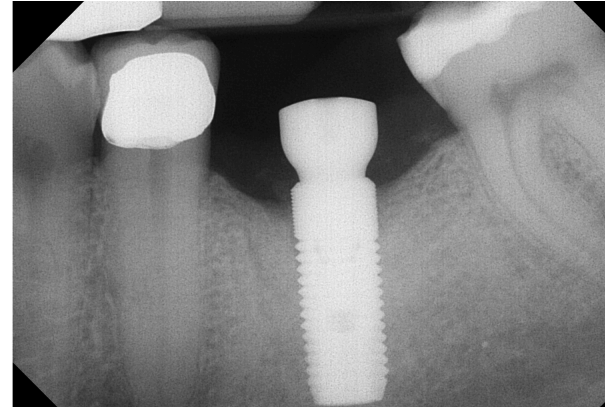
Bone graft



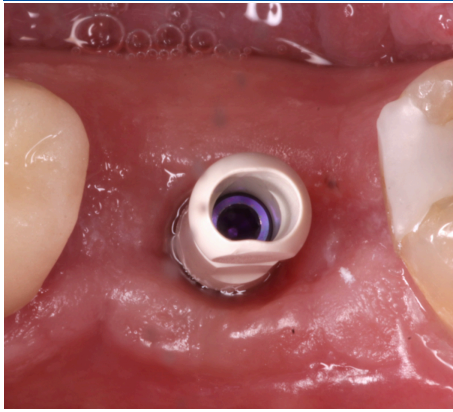
Sutures - Non-submerged



PROSTHETIC PHASE



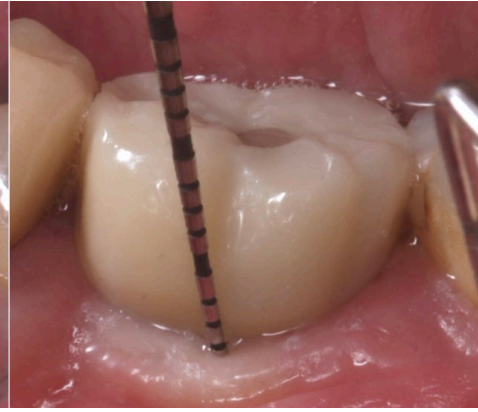
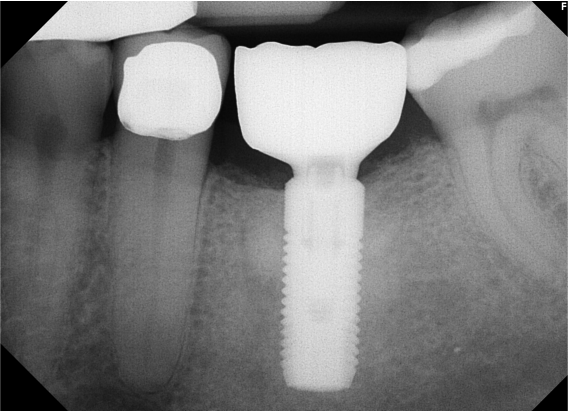
Scan body



Crown delivery



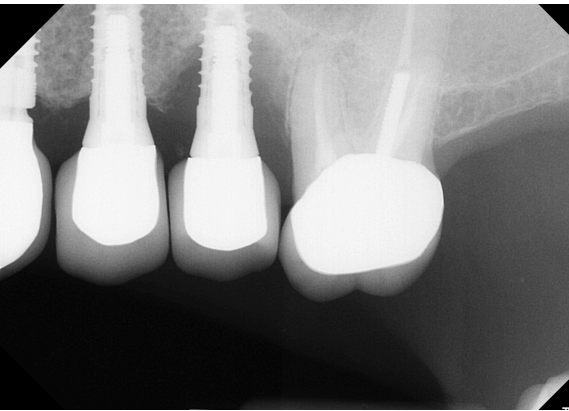
31-month follow-up



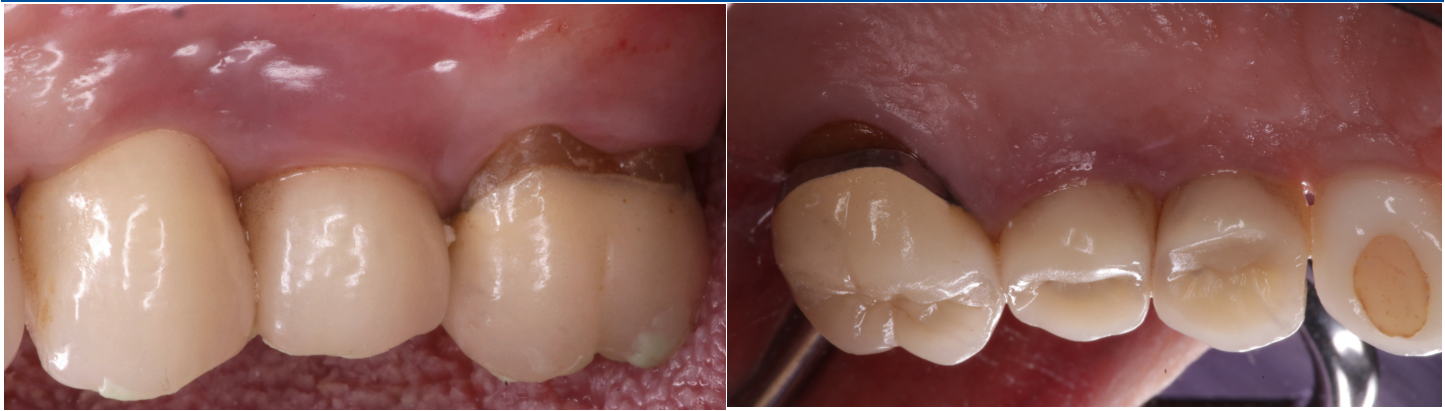
| #19 | MB | B | DB |
|-----|----|---|----|
| PD  | 2  | 3 | 2  |
| BOP | 0  | 0 | 0  |
| SUP | 0  | 0 | 0  |
|     | ML | L | DL |
| PD  | 3  | 2 | 2  |
| BOP | 0  | 1 | 1  |
| SUP | 0  | 0 | 0  |



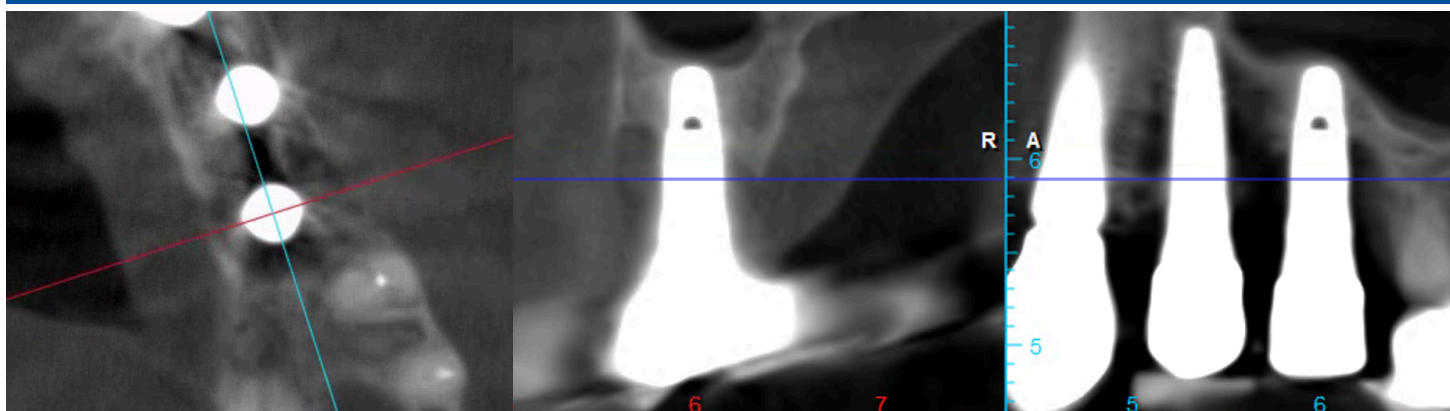
PRE-SURGICAL PHASE



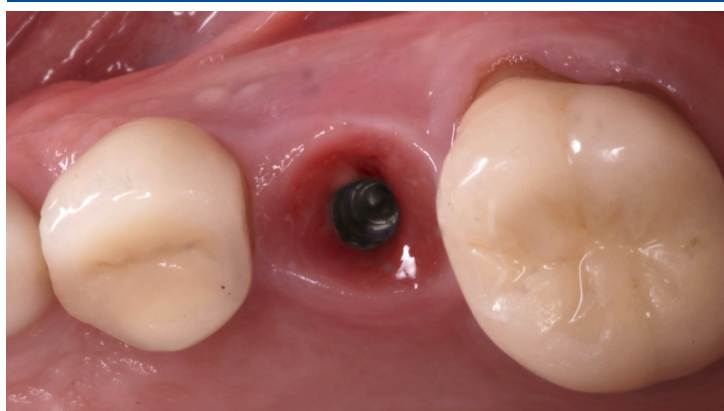
Baseline assessment



Radiographic assessment - Ic defect



Crown removal



| #13 | MB | B | DB |
|-----|----|---|----|
| PD  | 5  | 8 | 5  |
| BOP | 2  | 0 | 0  |
| SUP | 1  | 1 | 0  |
|     | ML | L | DL |
| PD  | 5  | 5 | 4  |
| BOP | 0  | 2 | 2  |
| SUP | 1  | 0 | 0  |

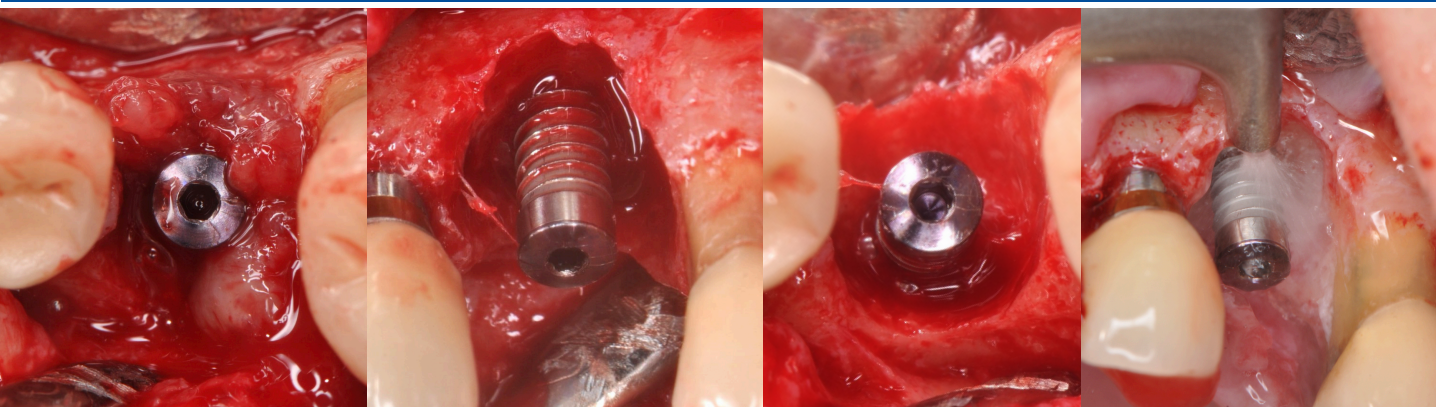
SURGICAL PHASE

6 weeks

Incision



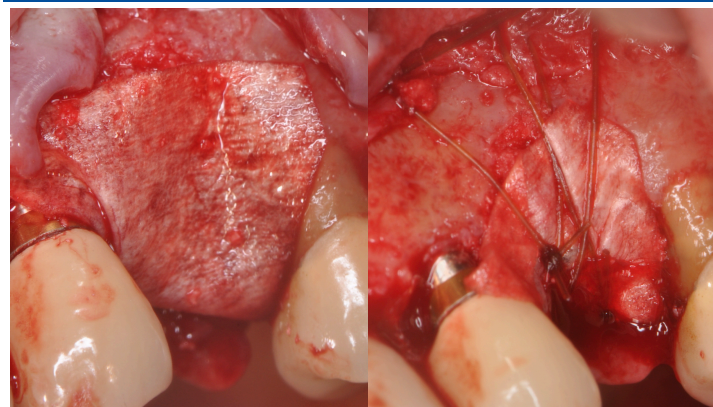
Granulation tissue/Decontamination



Xenograft + 10% collagen



Collagen membrane - Lasso



Sutures - Submerged

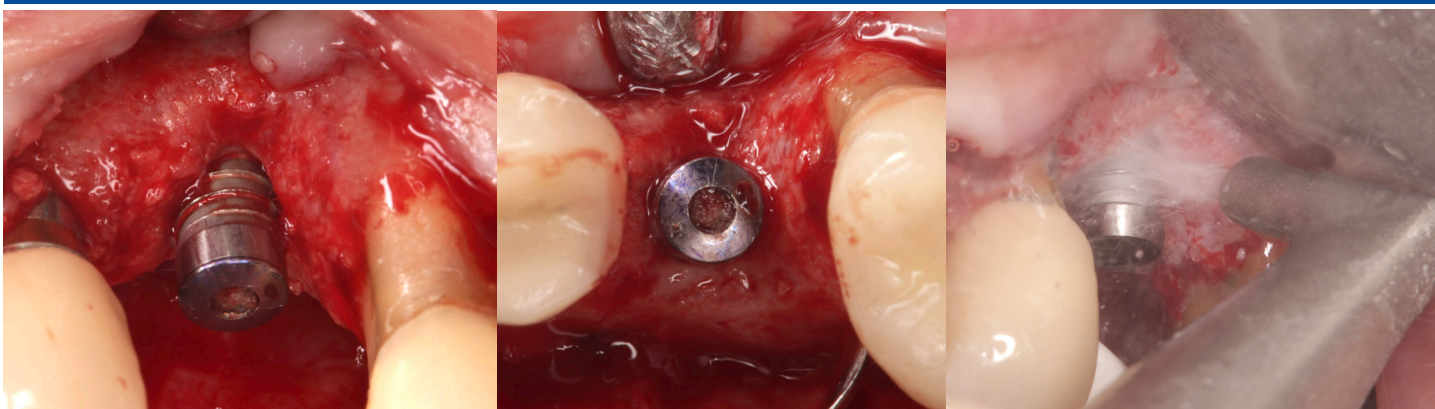


RE-ENTRY PHASE

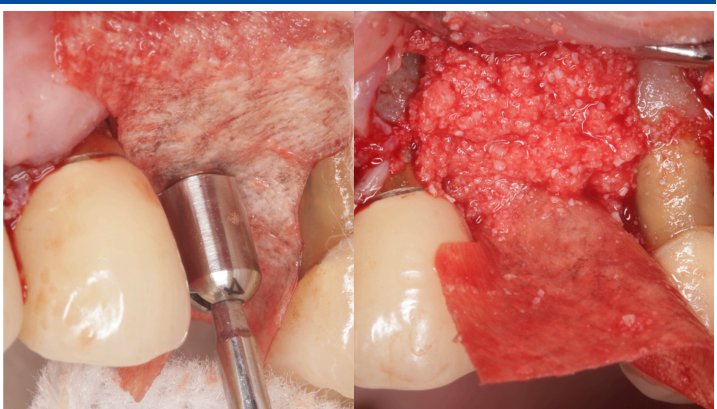
5 months/Incision



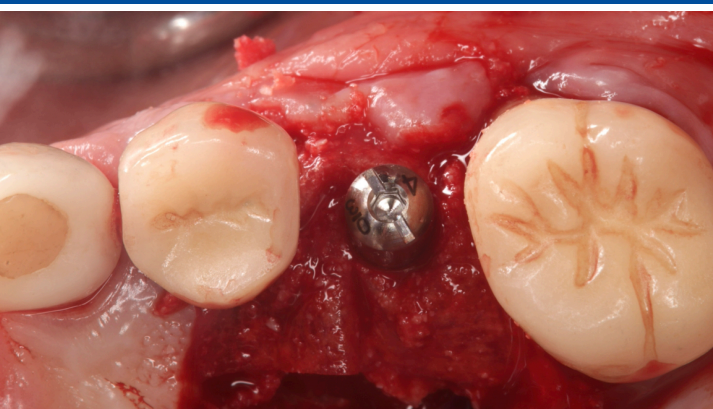
Defect/Decontamination



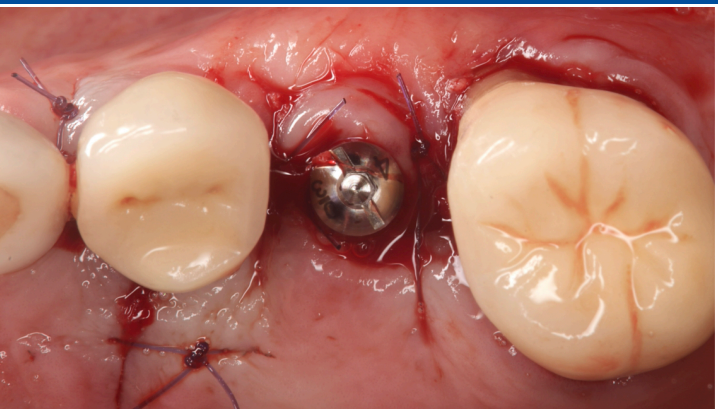
Collagen membrane/Bone graft



Membrane stabilization



Sutures - Non-submerged



PROSTHETIC PHASE

Provisional



Crown delivery



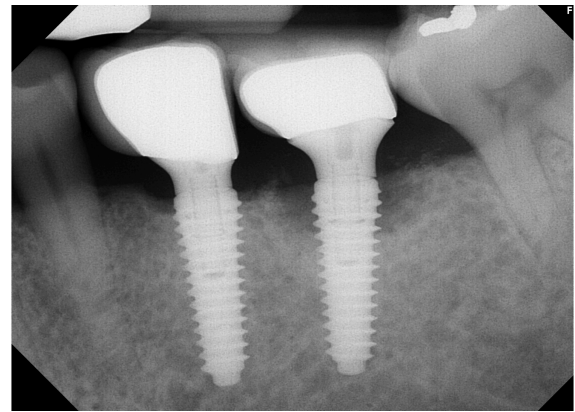
21 month follow-up



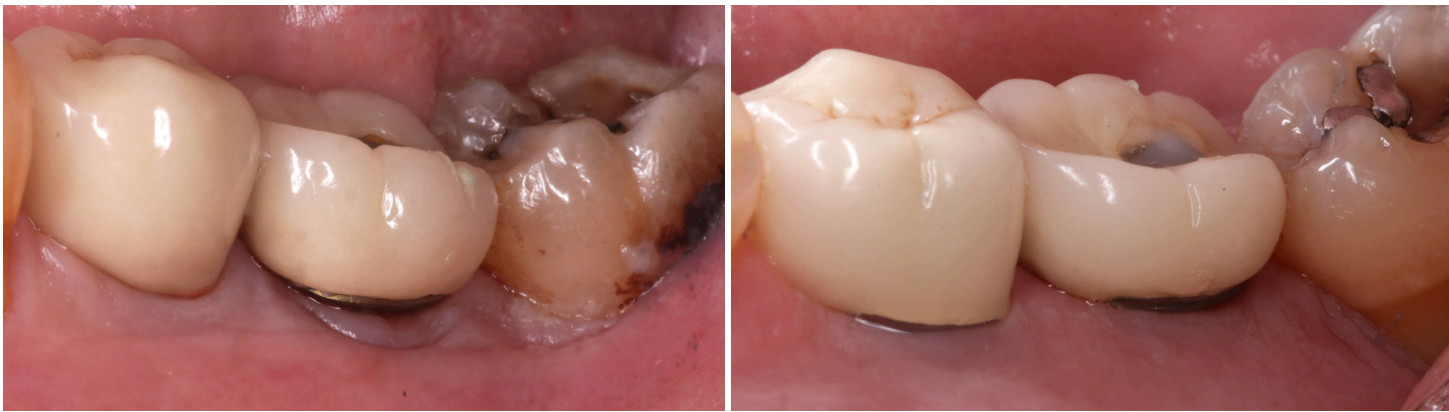
| #13 | MB | B | DB |
|-----|----|---|----|
| PD  | 3  | 1 | 3  |
| BOP | 0  | 1 | 0  |
| SUP | 0  | 0 | 0  |
|     | ML | L | DL |
| PD  | 2  | 3 | 3  |
| BOP | 1  | 0 | 1  |
| SUP | 0  | 0 | 0  |



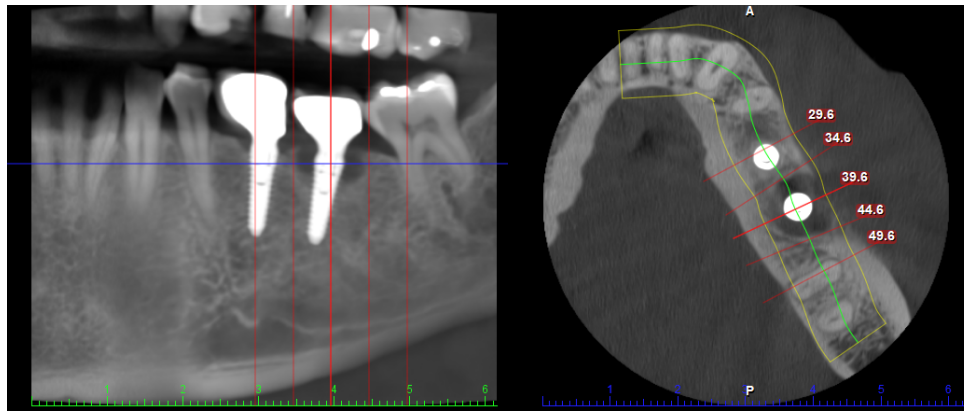
PRE-SURGICAL PHASE



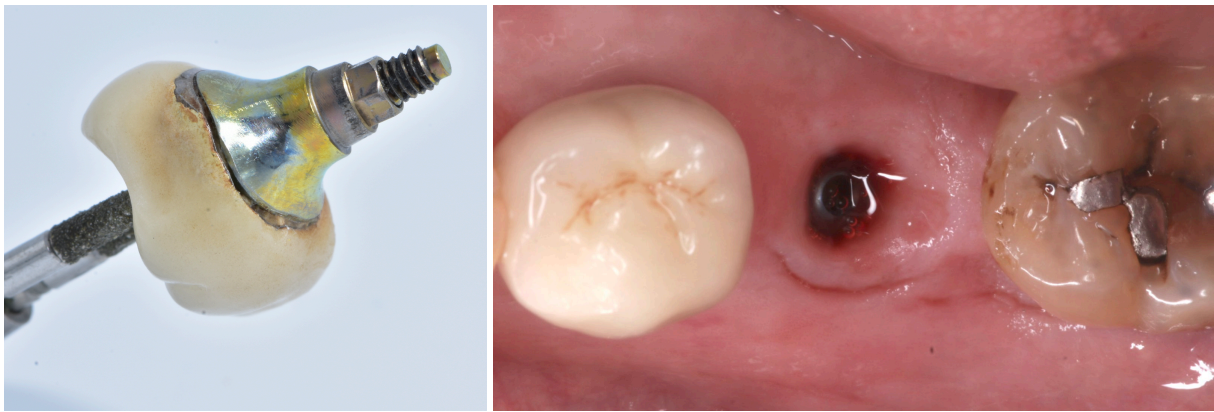
Baseline assessment



Radiographic assessment - 1e defect

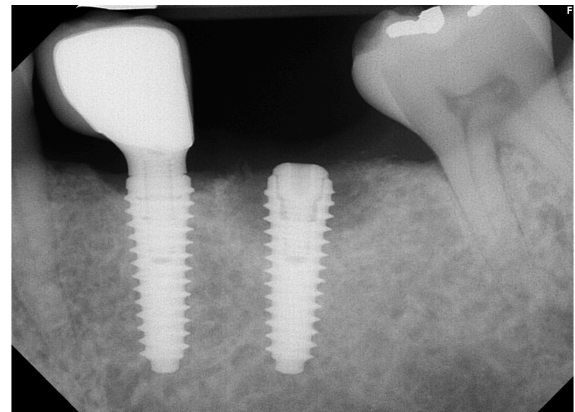


Crown removal



| #19 | MB | B | DB |
|-----|----|---|----|
| PD  | 7  | 6 | 7  |
| BOP | 0  | 0 | 0  |
| SUP | 1  | 1 | 1  |
|     | ML | L | DL |
| PD  | 4  | 7 | 4  |
| BOP | 2  | 2 | 2  |
| SUP | 0  | 0 | 0  |

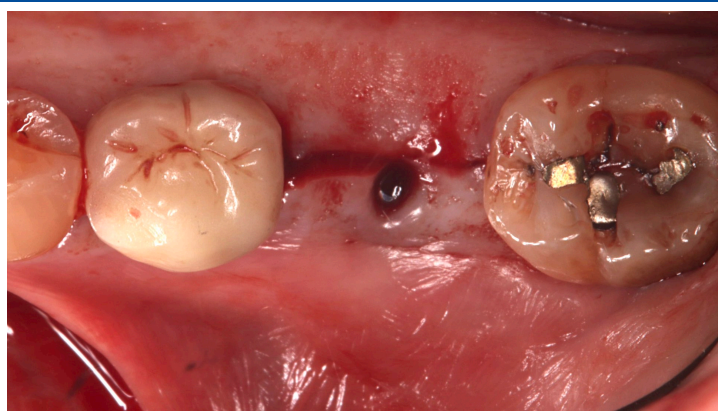
SURGICAL PHASE



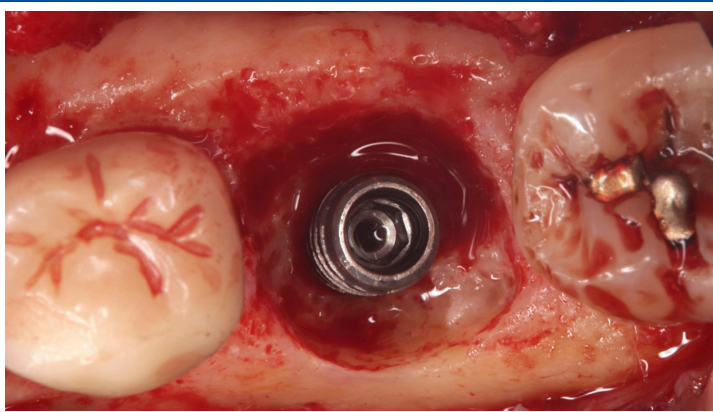
6 weeks



Incision



Granulation tissue removal



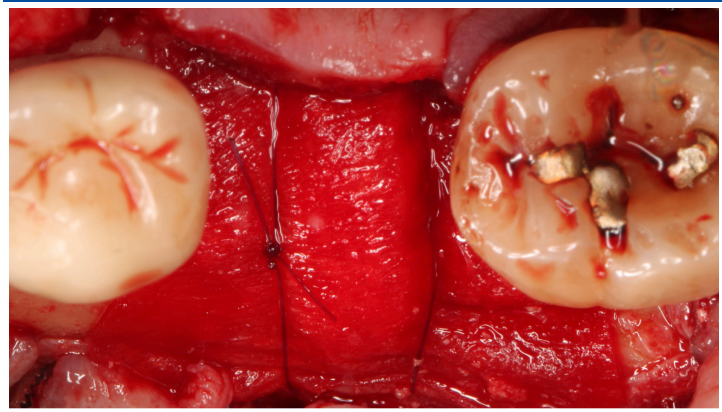
Decontamination



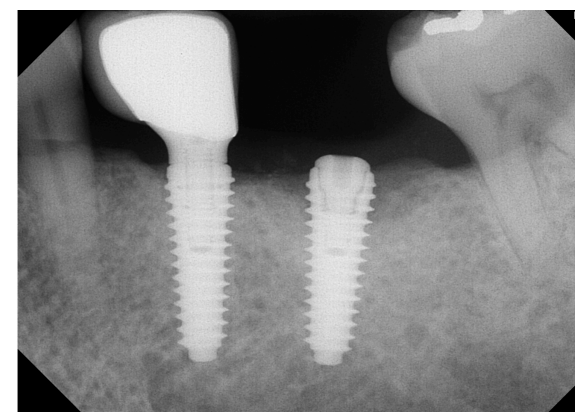
Xenograft + 10% collagen



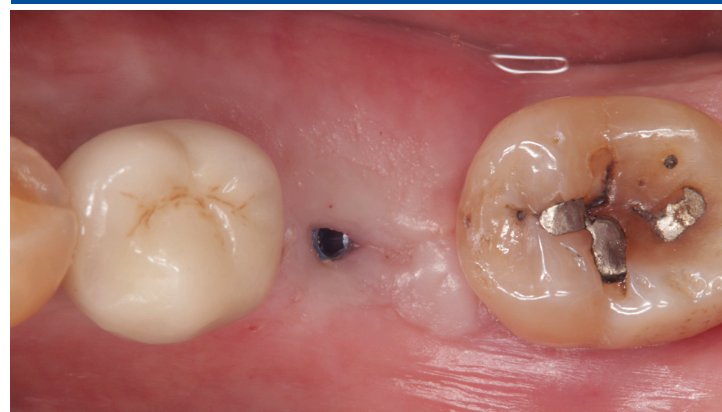
Lasso + Submerged



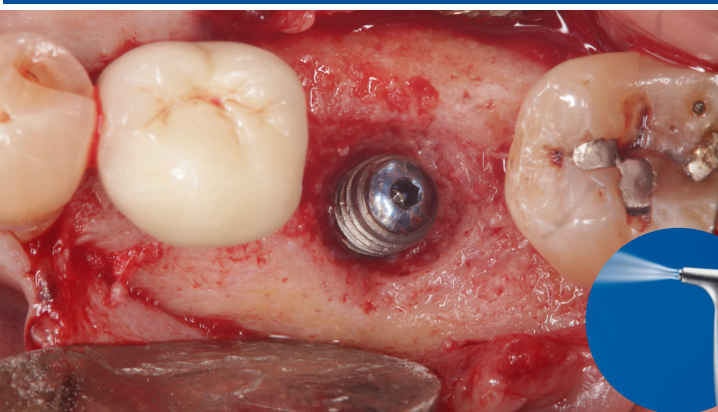
RE-ENTRY PHASE



5 months



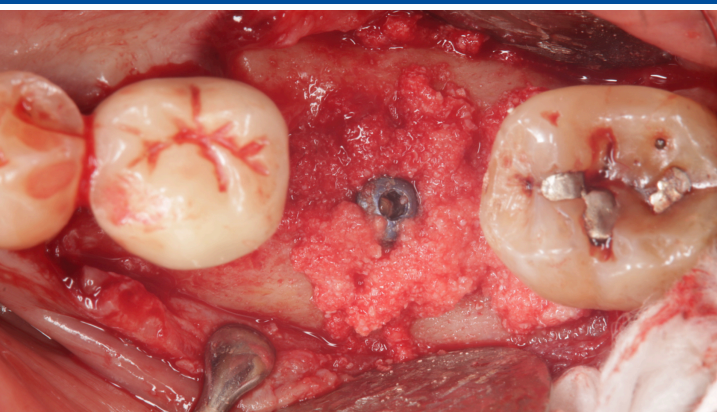
Defect/Decontamination



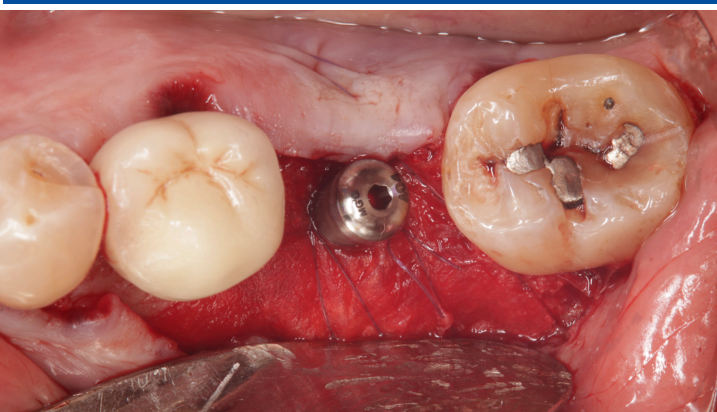
Poncho technique



Bone graft



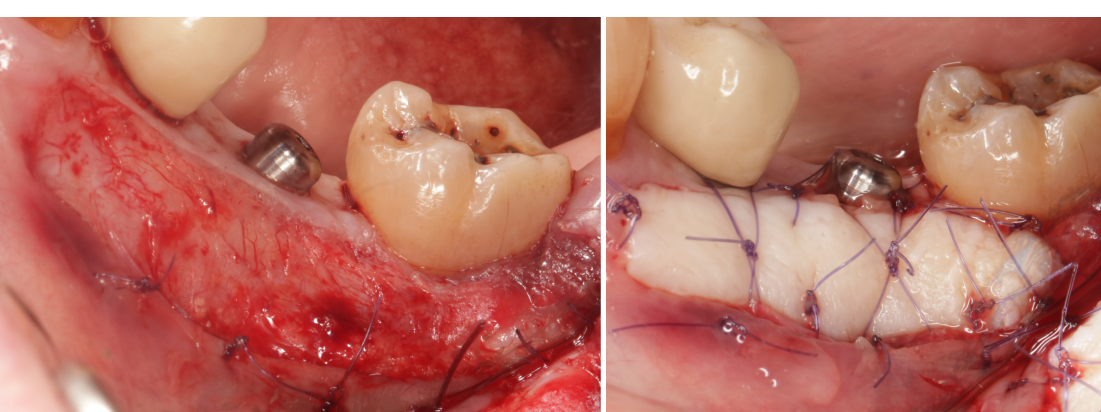
Collagen membrane



Sutures - Non-submerged



FREE GINGIVAL GRAFT



PROSTHETIC PHASE



14-month follow-up



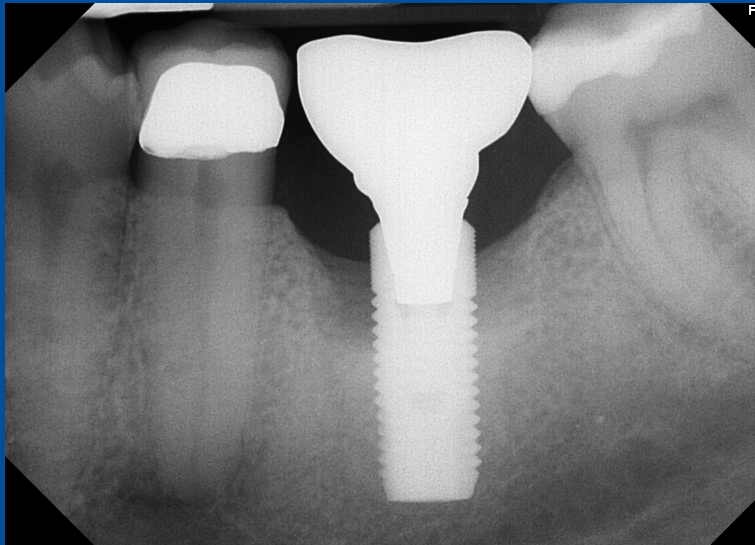
| #19 | MB | B | DB |
|-----|----|---|----|
| PD  | 3  | 4 | 4  |
| BOP | 0  | 1 | 0  |
| SUP | 0  | 0 | 0  |
|     | ML | L | DL |
| PD  | 3  | 2 | 2  |
| BOP | 0  | 0 | 0  |
| SUP | 0  | 0 | 0  |



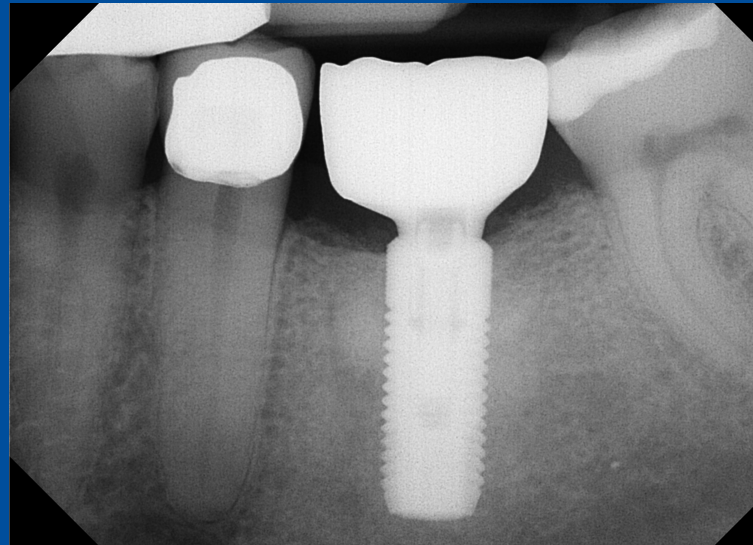
## BASELINE

## FOLLOW-UP

CASE 1

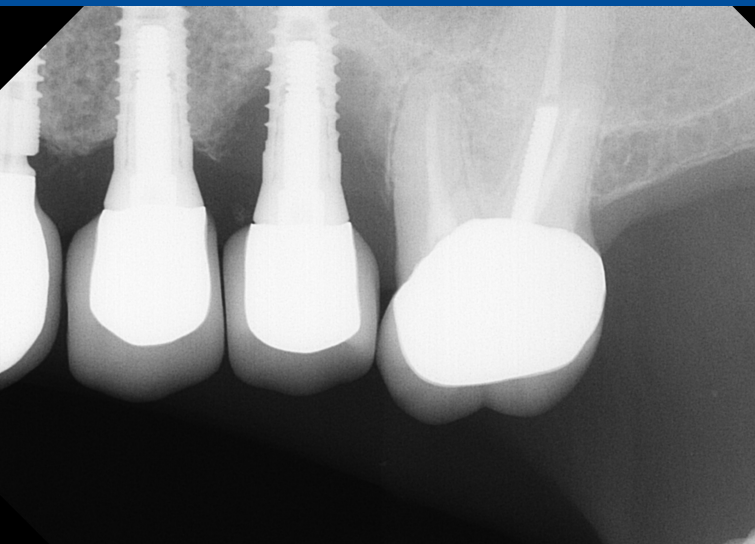


| #19 | MB | B | DB |
|-----|----|---|----|
| PD  | 7  | 8 | 4  |
| BOP | 2  | 0 | 0  |
| SUP | 0  | 1 | 0  |
|     | ML | L | DL |
| PD  | 3  | 5 | 4  |
| BOP | 2  | 0 | 0  |
| SUP | 0  | 0 | 0  |

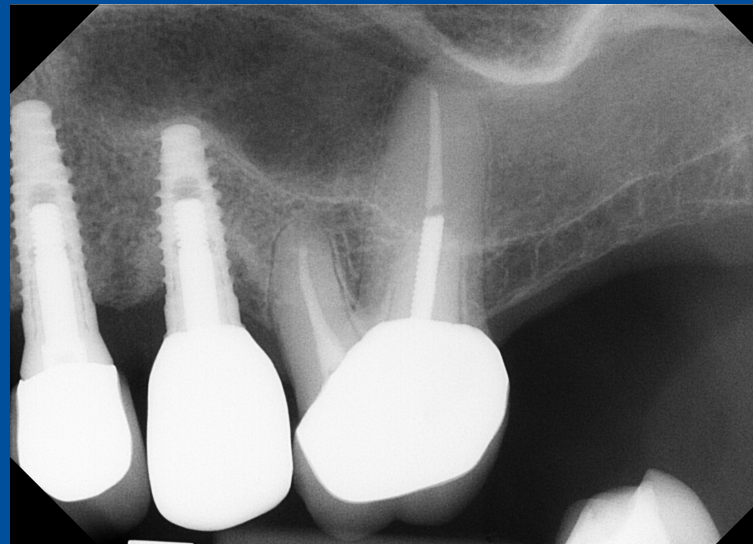


| #19 | MB | B | DB |
|-----|----|---|----|
| PD  | 2  | 3 | 2  |
| BOP | 0  | 0 | 0  |
| SUP | 0  | 0 | 0  |
|     | ML | L | DL |
| PD  | 3  | 2 | 2  |
| BOP | 0  | 1 | 1  |
| SUP | 0  | 0 | 0  |

CASE 2



| #13 | MB | B | DB |
|-----|----|---|----|
| PD  | 5  | 8 | 5  |
| BOP | 2  | 0 | 0  |
| SUP | 1  | 1 | 0  |
|     | ML | L | DL |
| PD  | 5  | 5 | 4  |
| BOP | 0  | 2 | 2  |
| SUP | 1  | 0 | 0  |



| #13 | MB | B | DB |
|-----|----|---|----|
| PD  | 3  | 1 | 3  |
| BOP | 0  | 1 | 0  |
| SUP | 0  | 0 | 0  |
|     | ML | L | DL |
| PD  | 2  | 3 | 3  |
| BOP | 1  | 0 | 1  |
| SUP | 0  | 0 | 0  |

CASE 3



| #19 | MB | B | DB |
|-----|----|---|----|
| PD  | 7  | 6 | 7  |
| BOP | 0  | 0 | 0  |
| SUP | 1  | 1 | 1  |
|     | ML | L | DL |
| PD  | 4  | 7 | 4  |
| BOP | 2  | 2 | 2  |
| SUP | 0  | 0 | 0  |



| #19 | MB | B | DB |
|-----|----|---|----|
| PD  | 2  | 3 | 2  |
| BOP | 0  | 1 | 1  |
| SUP | 0  | 0 | 0  |
|     | ML | L | DL |
| PD  | 5  | 3 | 2  |
| BOP | 2  | 2 | 1  |
| SUP | 0  | 0 | 0  |

## CONCLUSION

The BRP offers a reproducible and biologically driven approach to the treatment of advanced peri-implant defects. By combining pre-surgical tissue conditioning, effective implant surface decontamination, regenerative surgical techniques, and prosthetic refinement, BRP enhances the predictability of bone regeneration and supports long-term implant preservation.