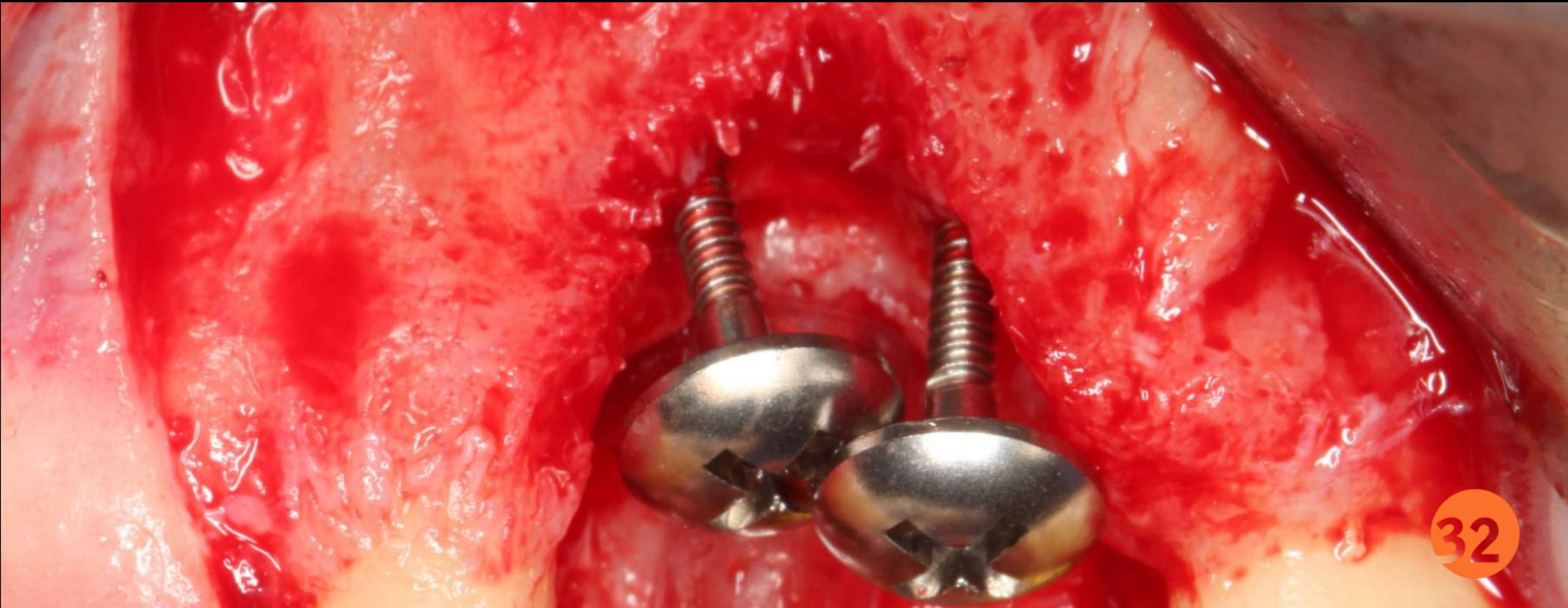
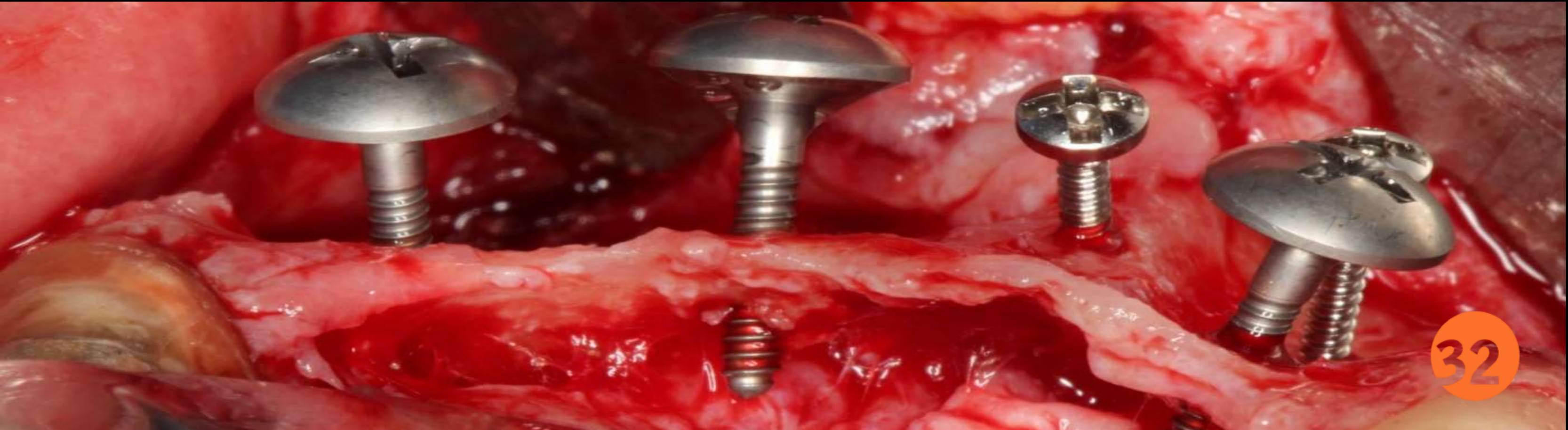


THE UMBRELLA TECHNIQUE



BIOLOGIC BACKGROUND

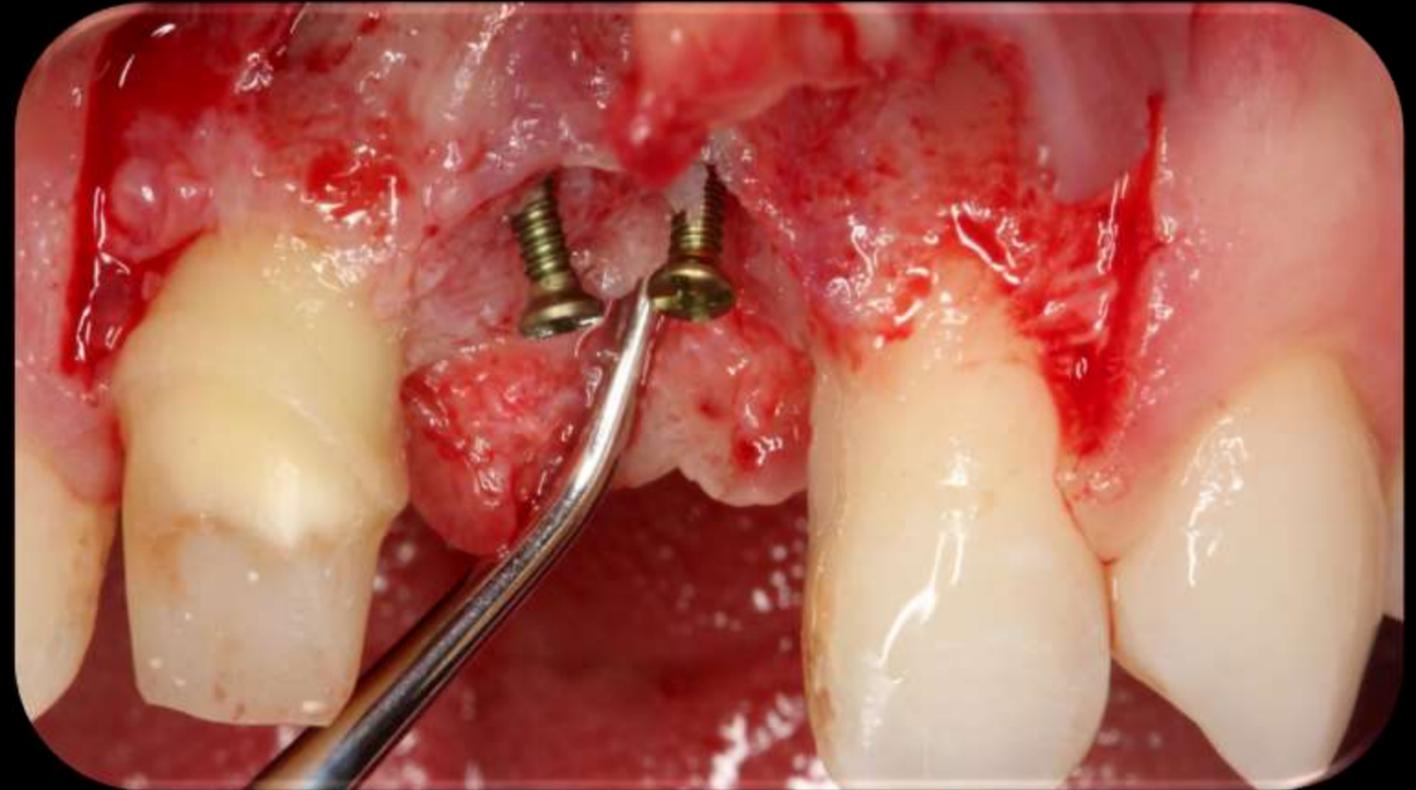
Augmentation require a stabilization of the coagulum, “immobile space” and blood supply



TENTING SCREWS IN LITERATURE

Tenting techniques to stabilize particulated bone substitutes are well known” .

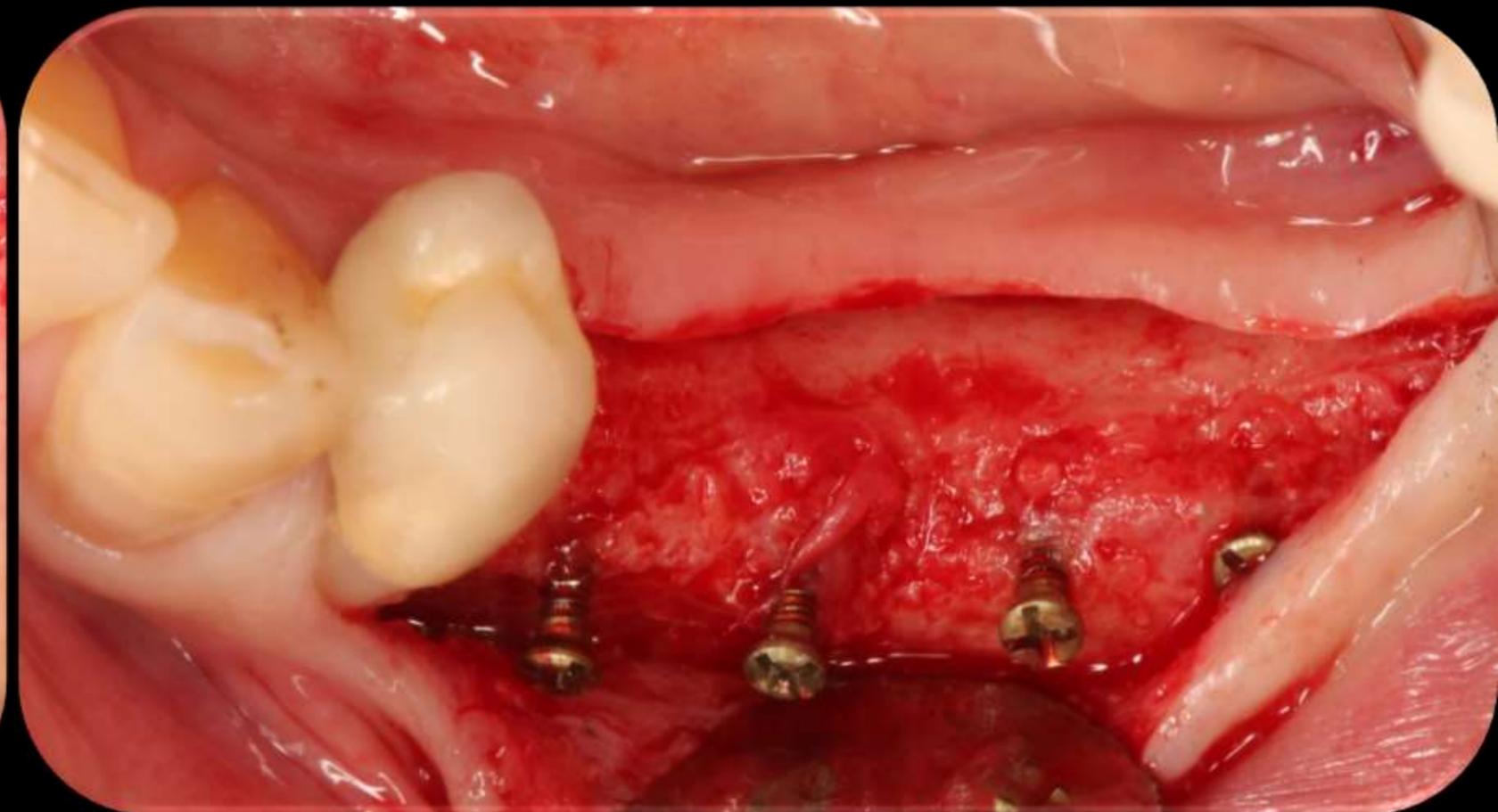
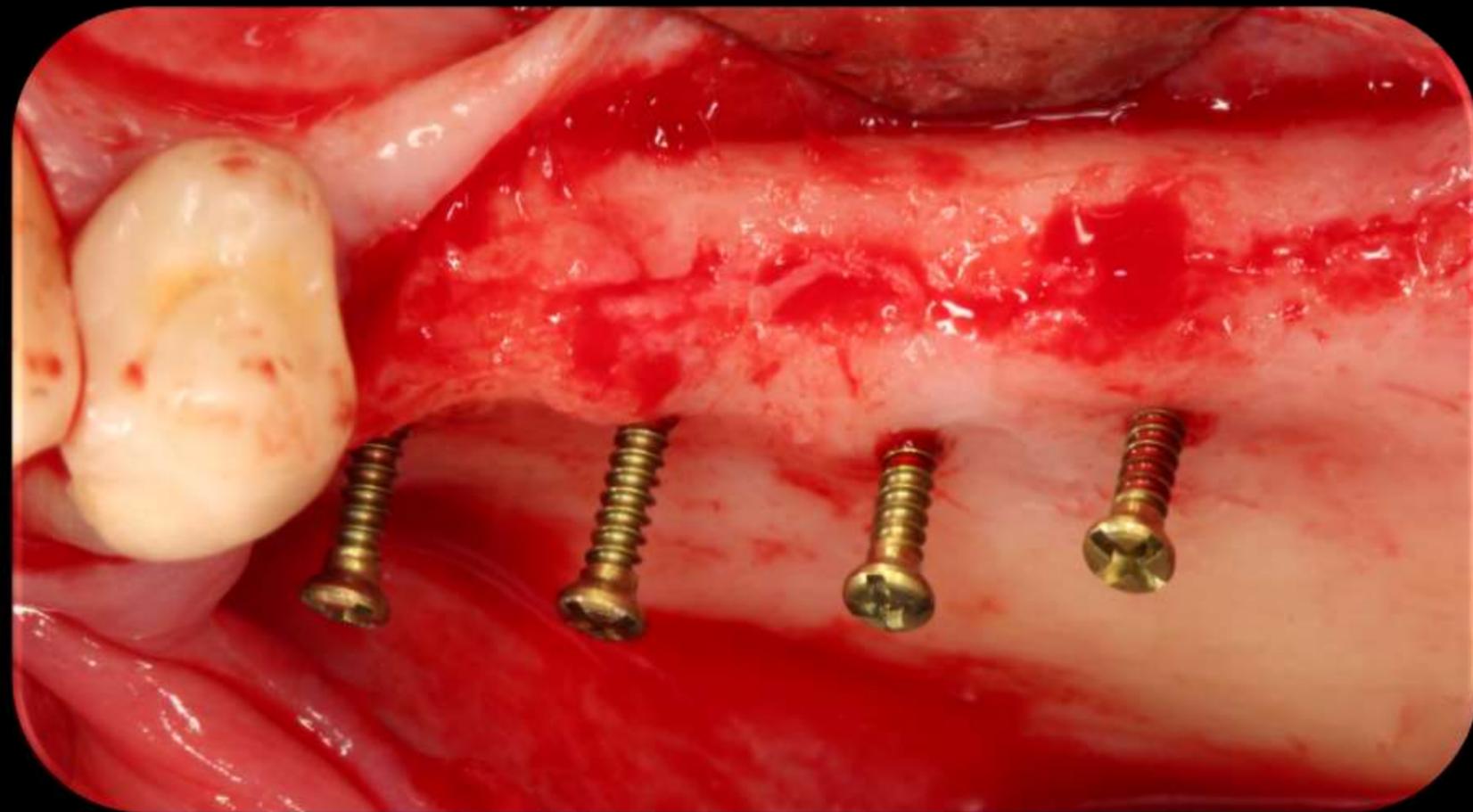
Till now small headed micro-screws have been used



González-Ulloa M, Stevens E. The tent-pole mechanics in the correction of the retractive syndrome of the middle third of the face. *Klin Med Osterr Z Wiss Prakt Med.* 1967;22(11):483-4.

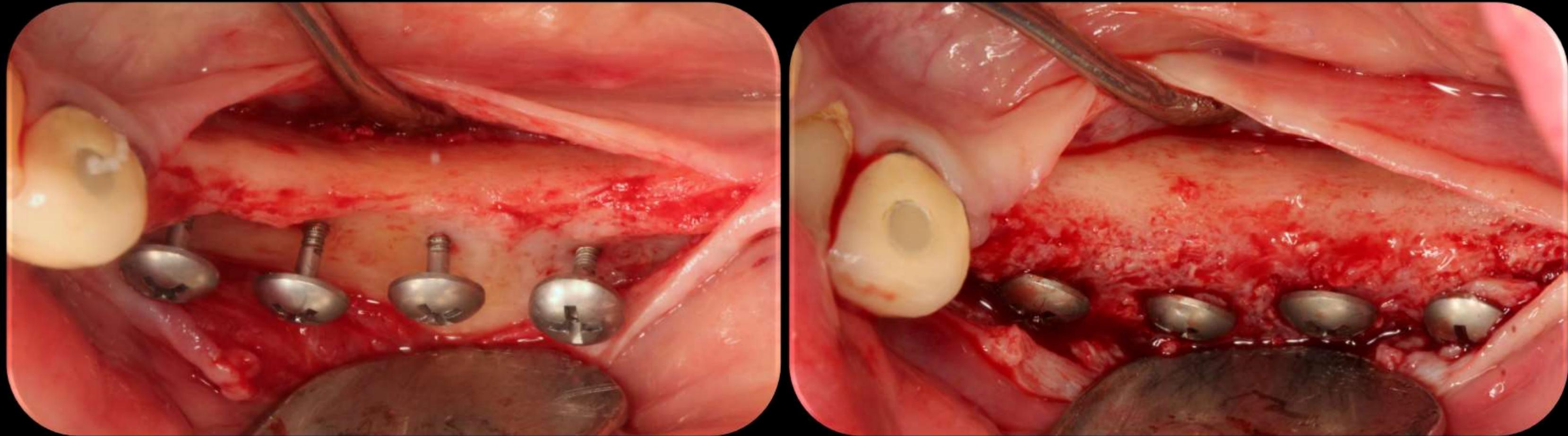
Simon BI, Chiang TF, Drew HJ. Alternative to the gold standard for alveolar ridge augmentation: tenting screw technology. *Quintessence Int.* 2010 May;41(5):379-86.

CLASSICAL TENTING TECHNIQUE



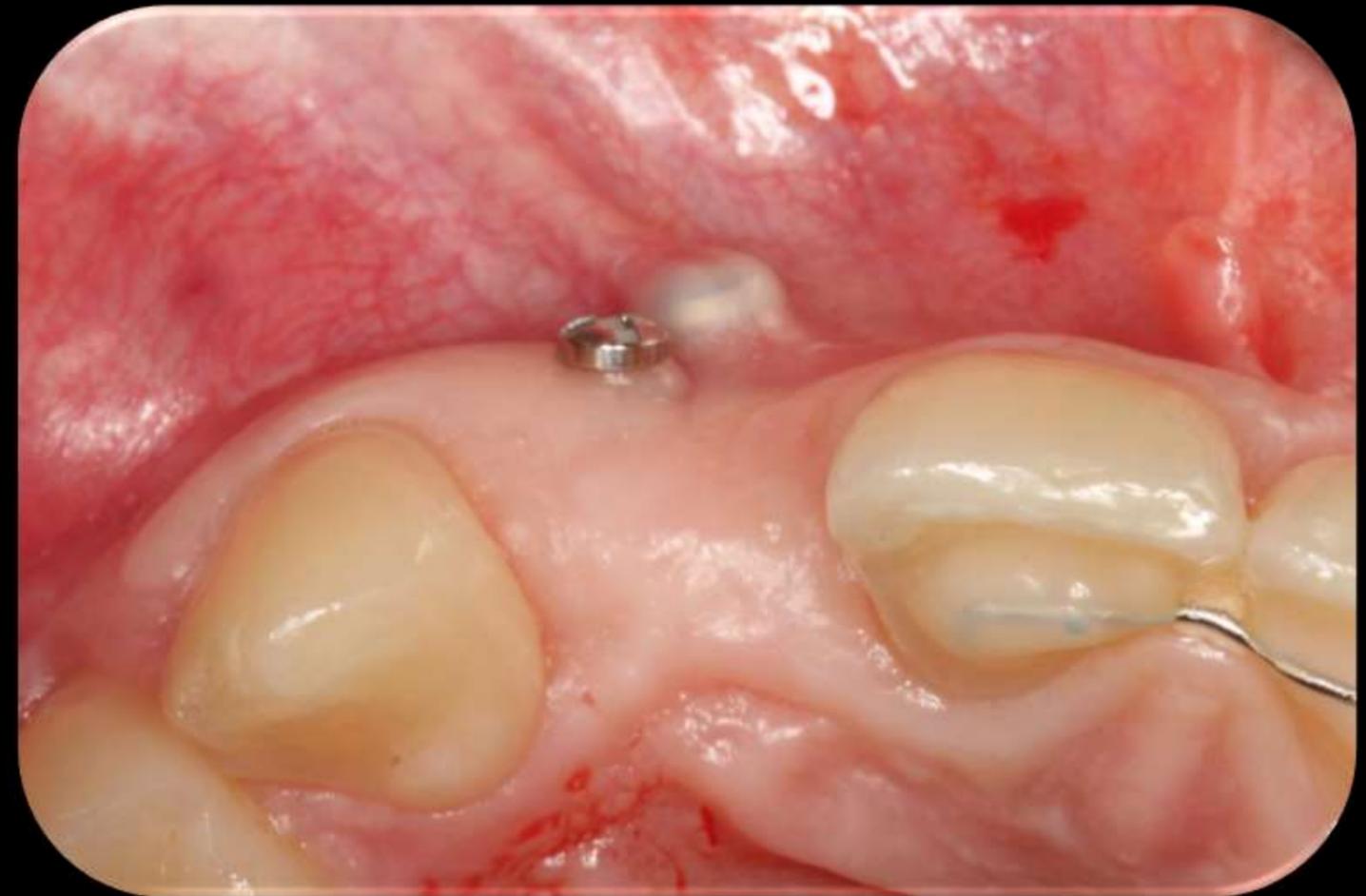
classical screw heads do support but not provide immobile space predictably – thus resorption processes are unpredictable

UMBRELLATECHNIQUE



immobile space is provided by the heads of the screws (external diameter 5 mm) safely – in contrary to conventional screw heads

CLASSICAL TENTING TECHNIQUE



classical screw heads have a small diameter and perforate due to resorption of bone substitute

UMBRELLATECHNIQUE



Umbrella screws have a wide diameter inhibit resorption of bone substitute and tent soft tissue up reliably

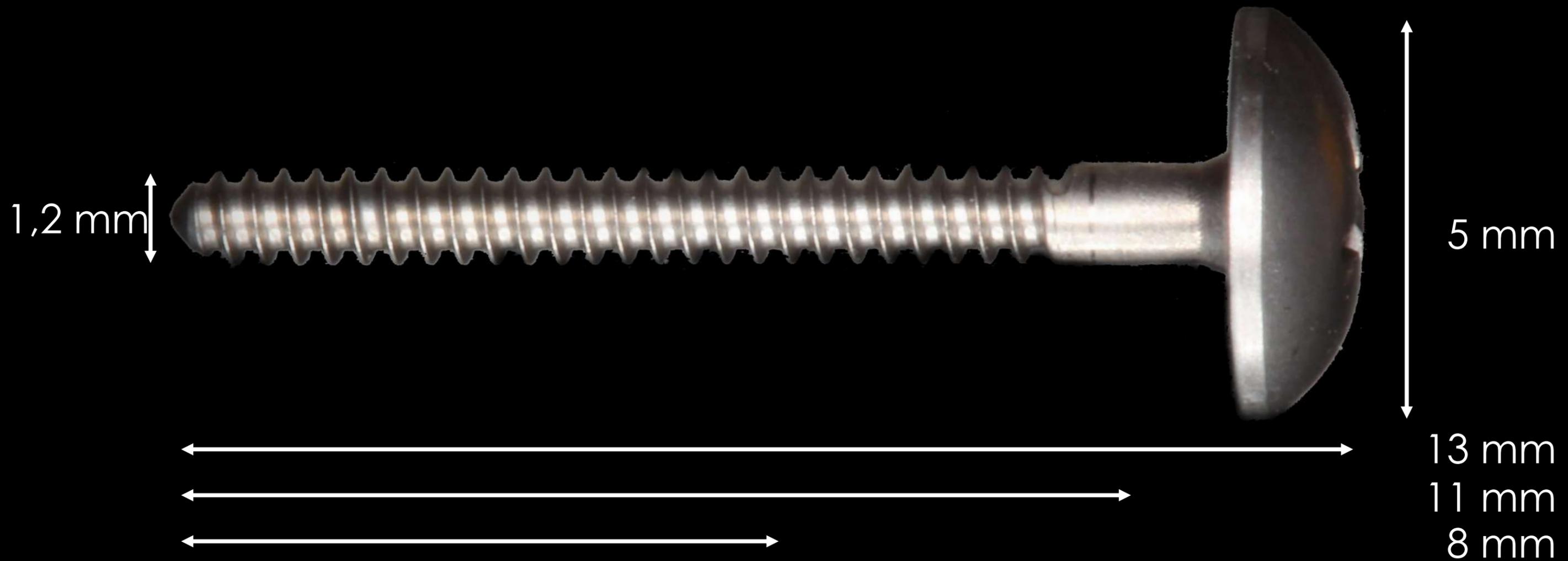
UMBRELLA TECHNIQUE

The head of the screw is:

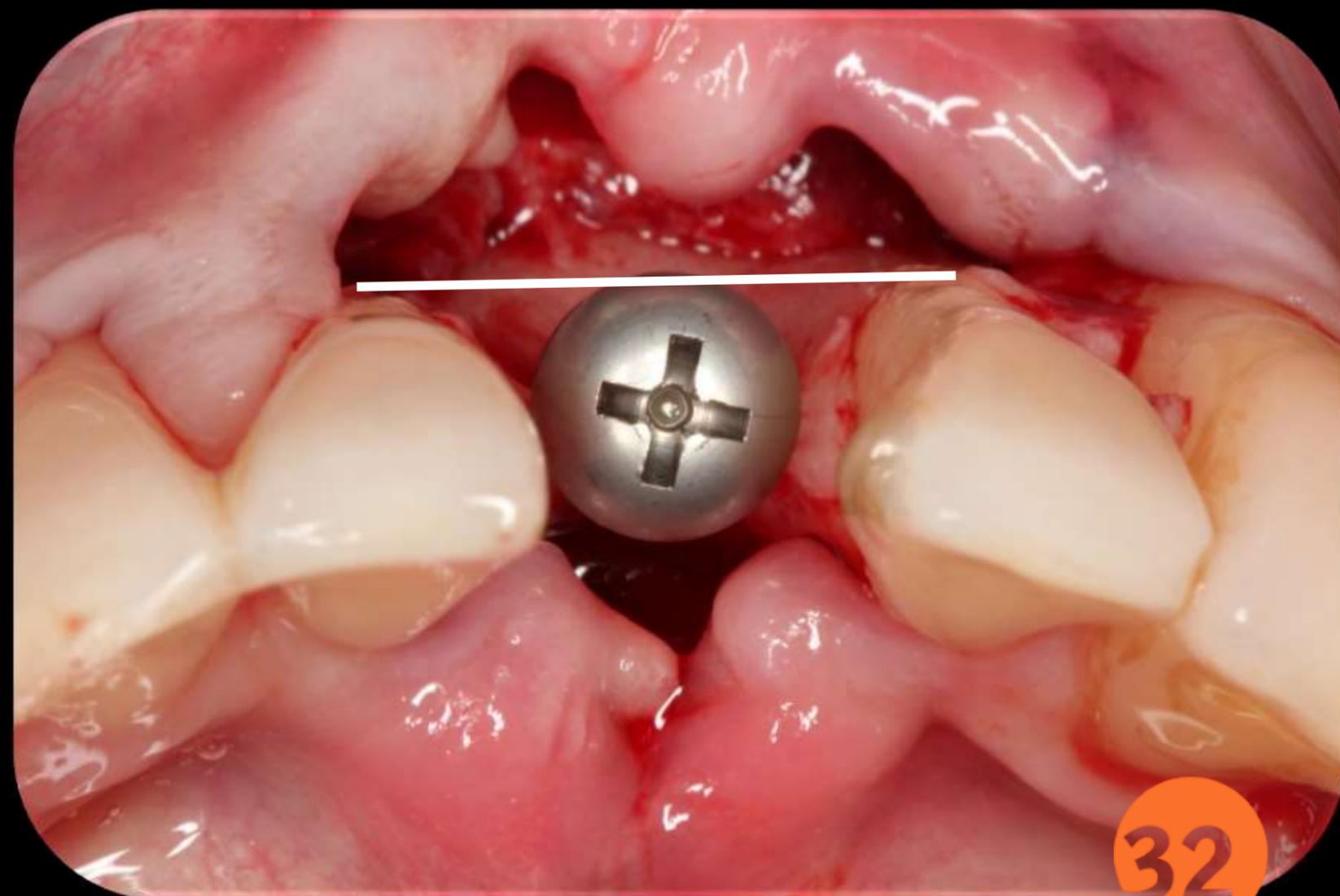
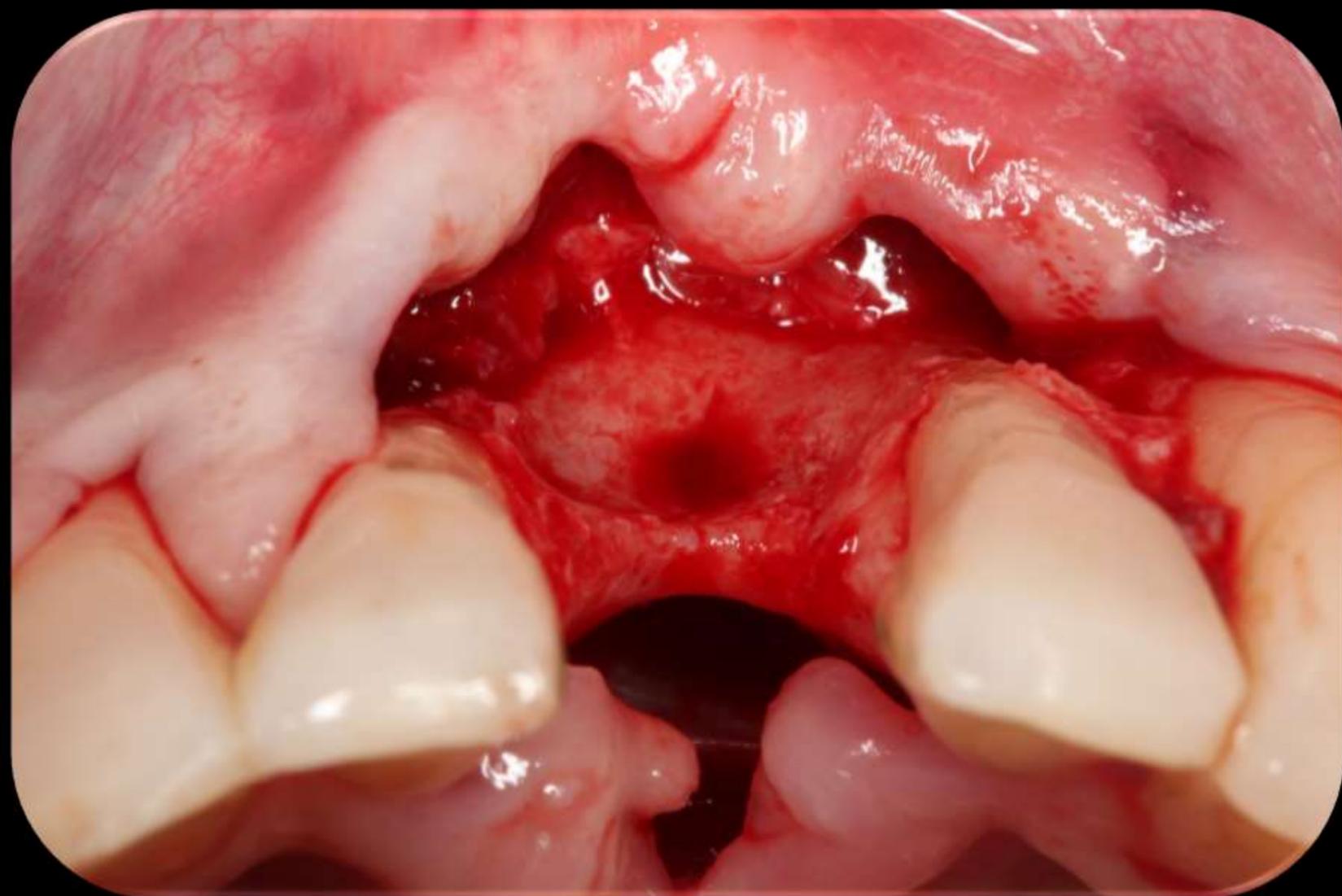
- wide
- flat
- without sharp edges
- the screw is thin to generate a maximum of bone
- is made of surgical steel to ensure it does not osseointegrate
- easy to remove



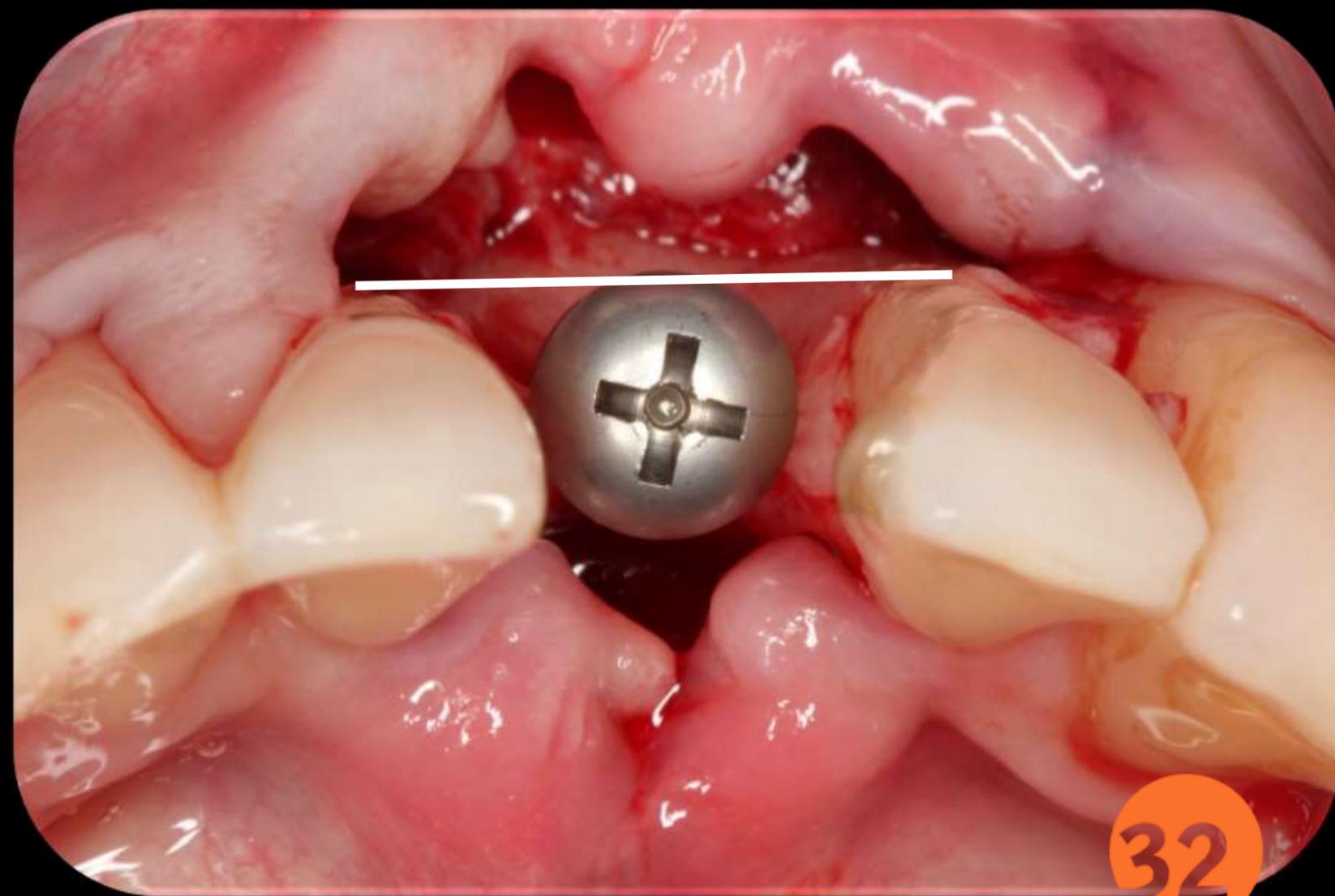
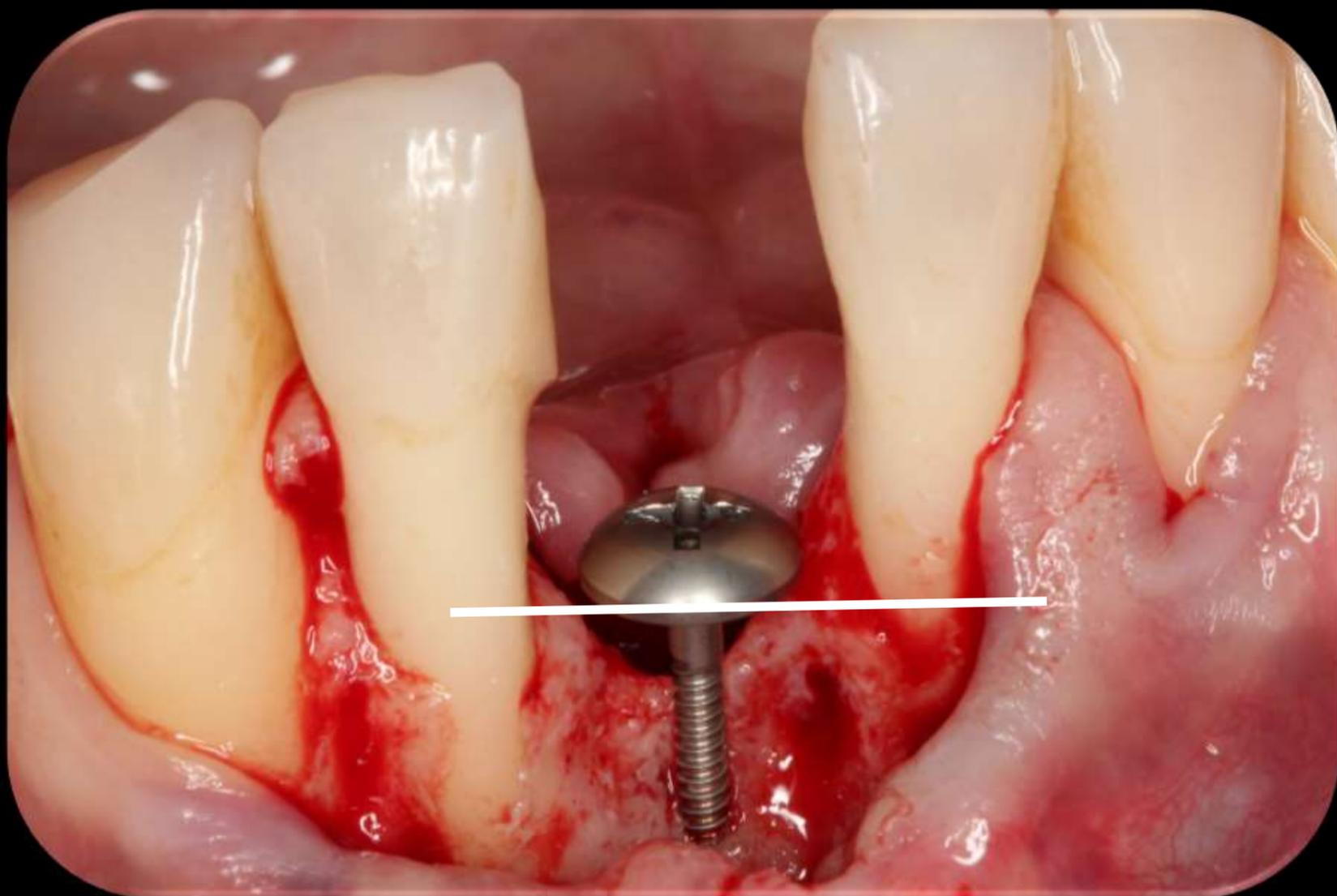
CONFIGURATIONS



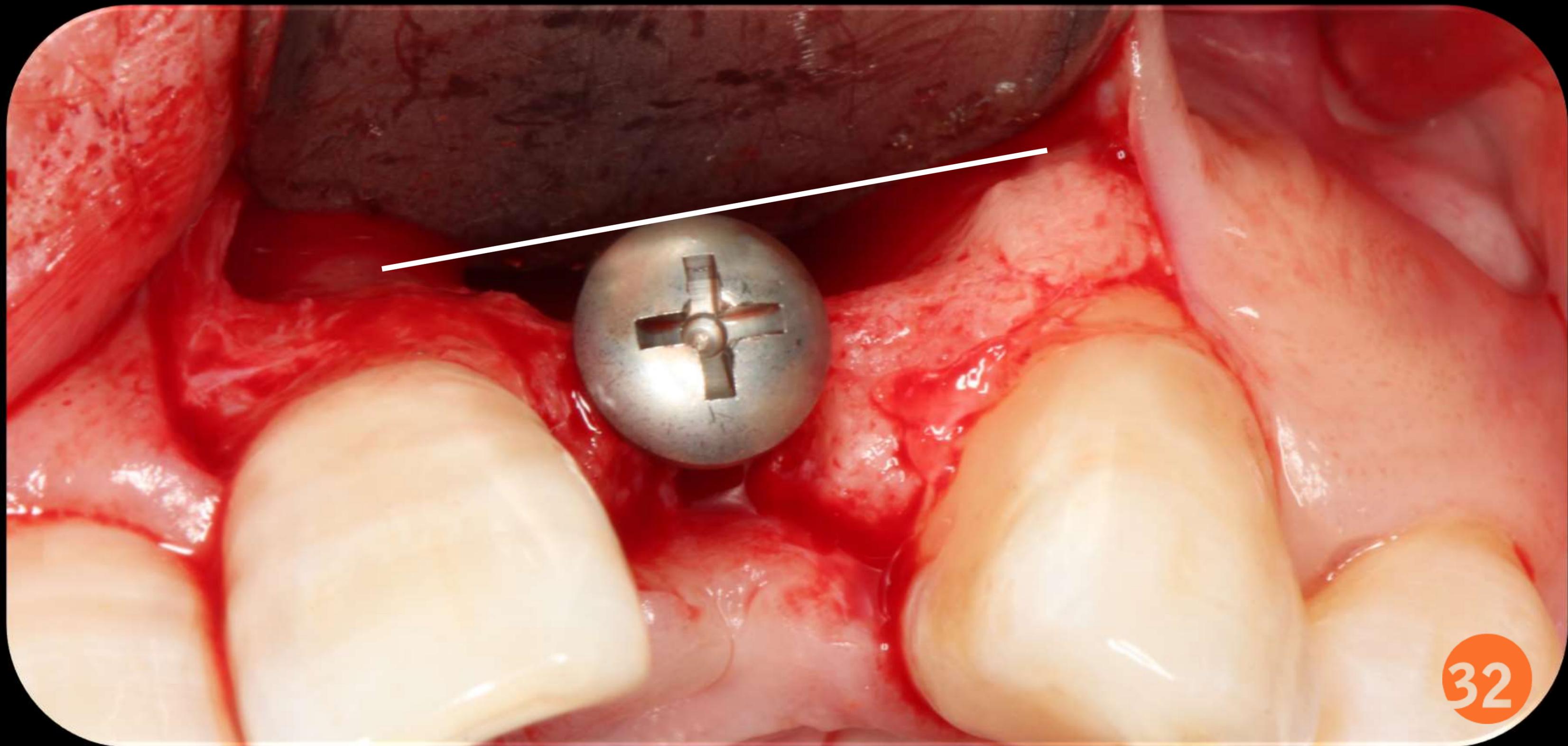
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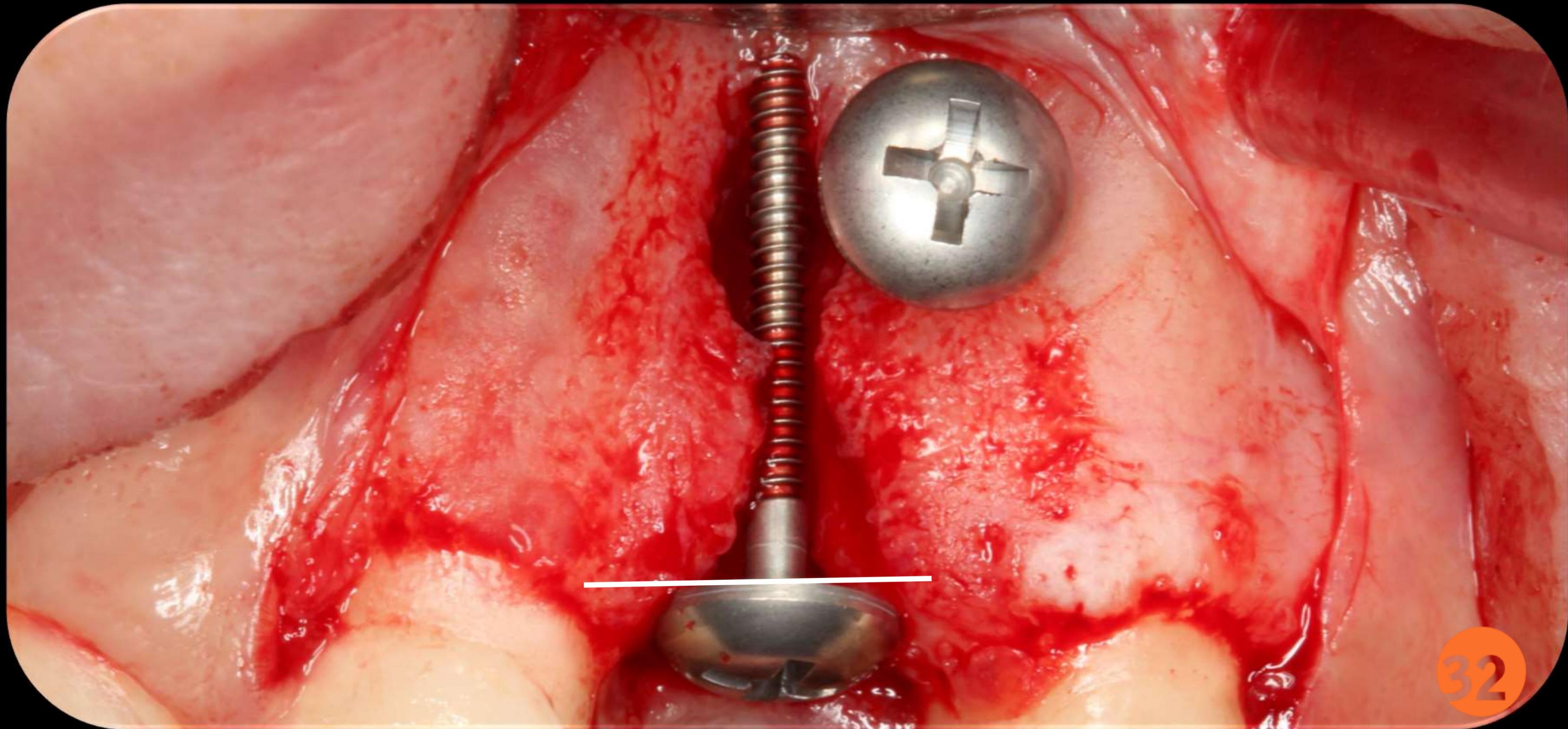
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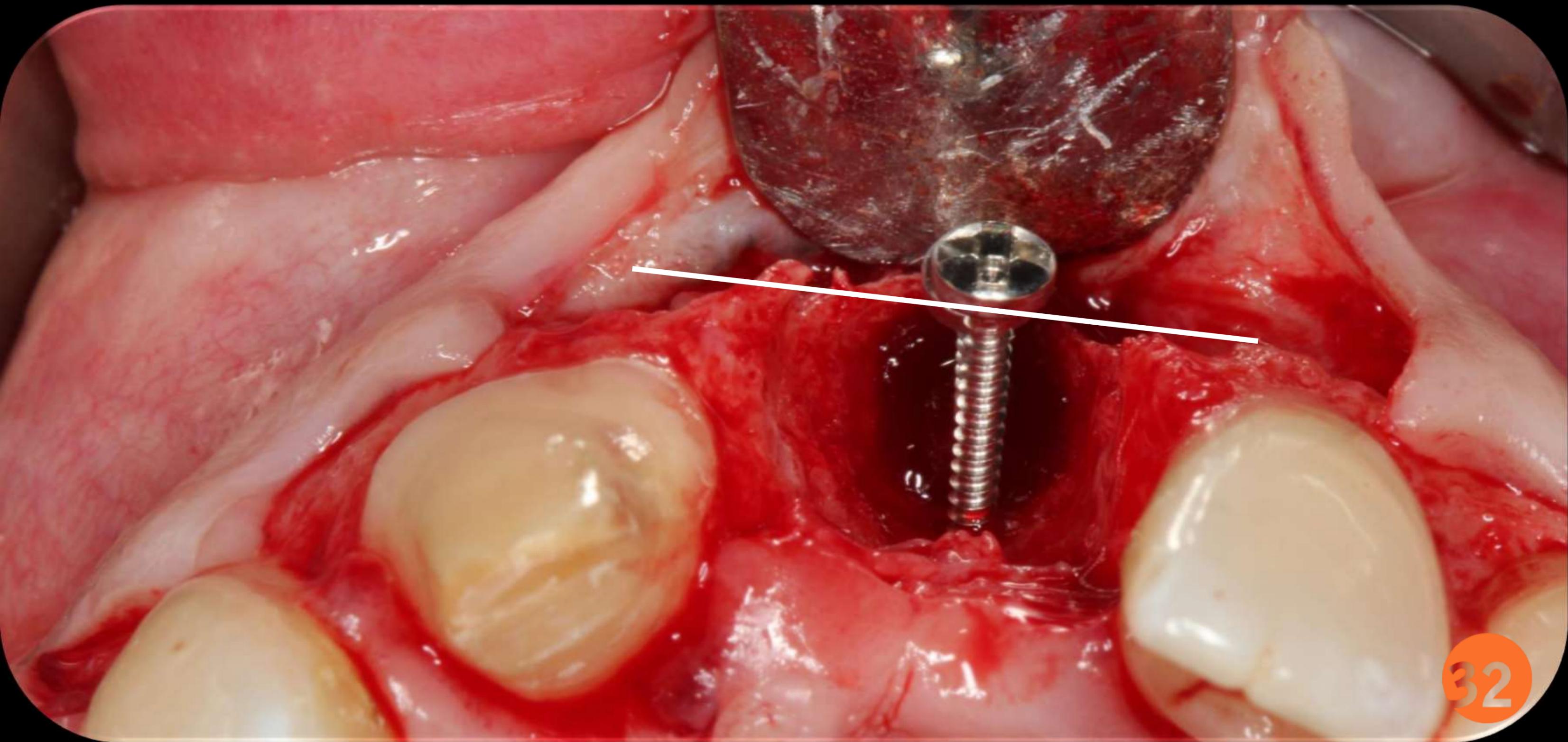
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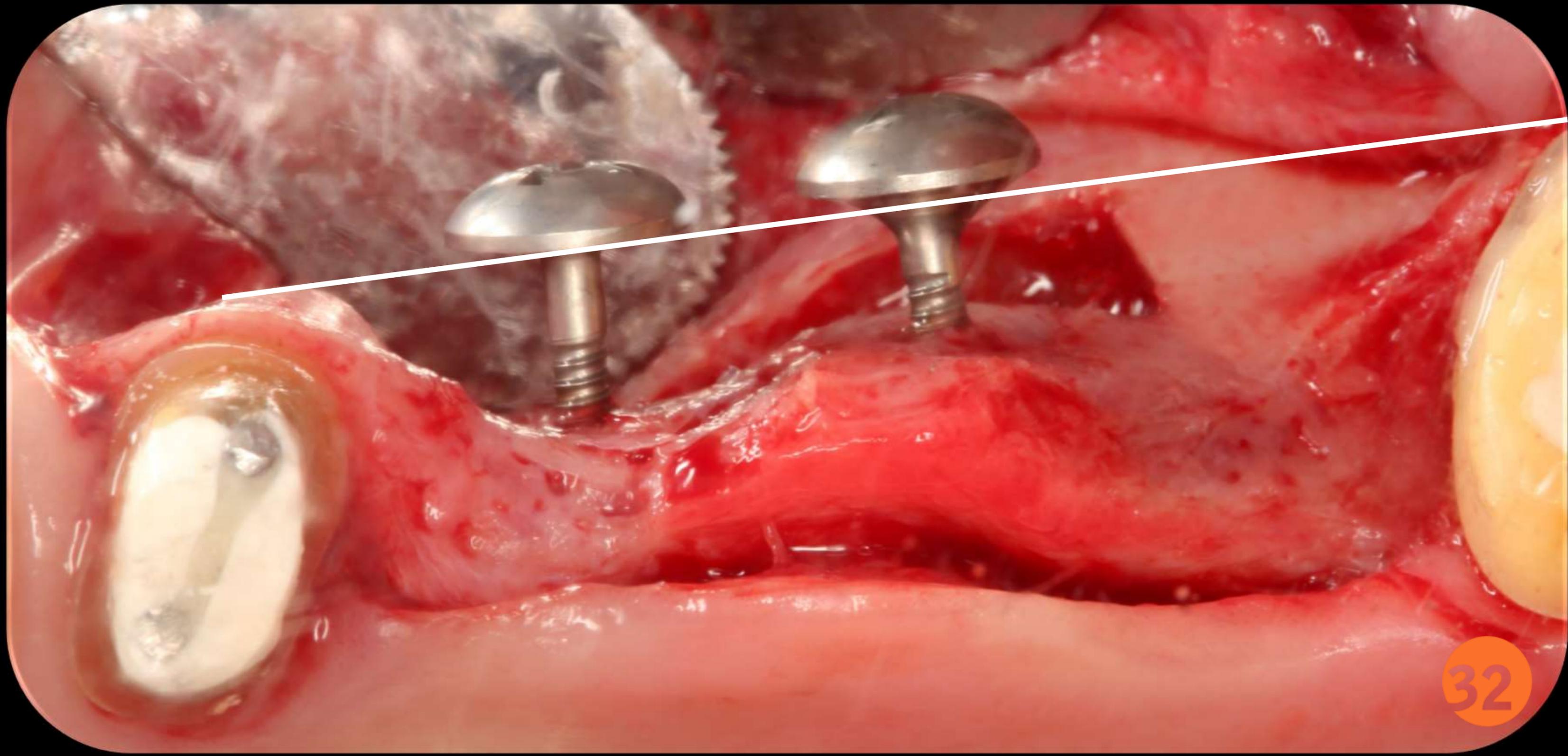
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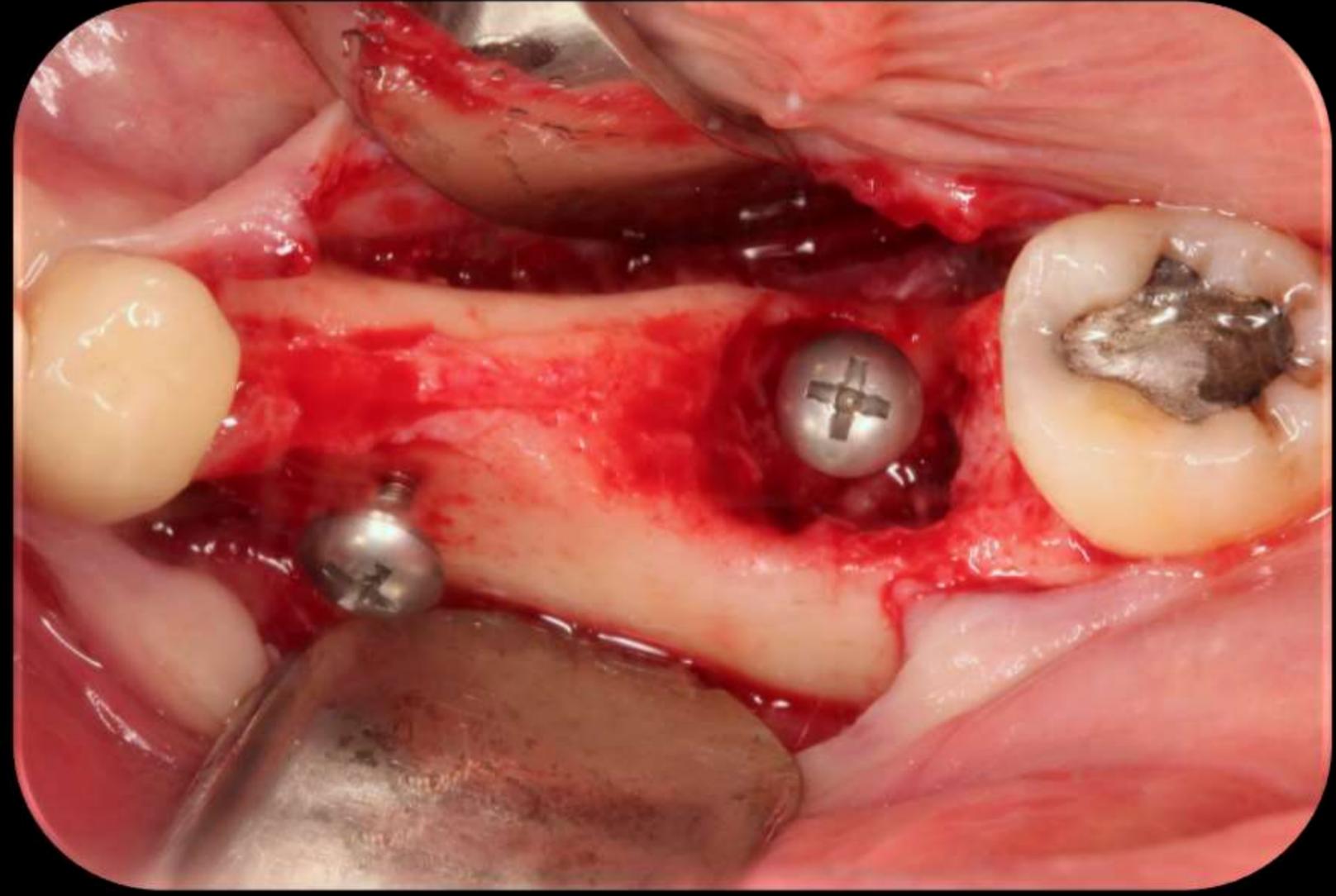
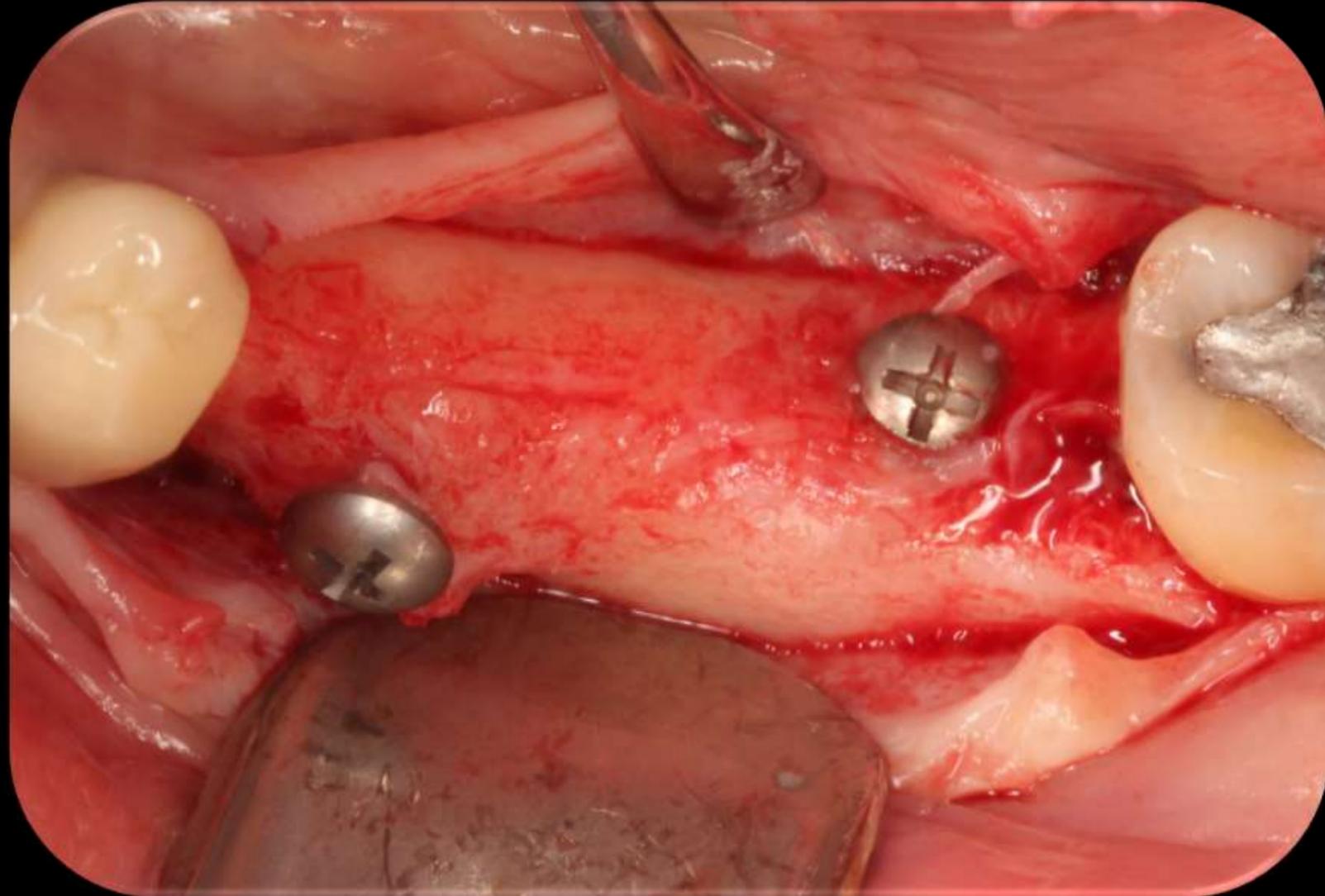
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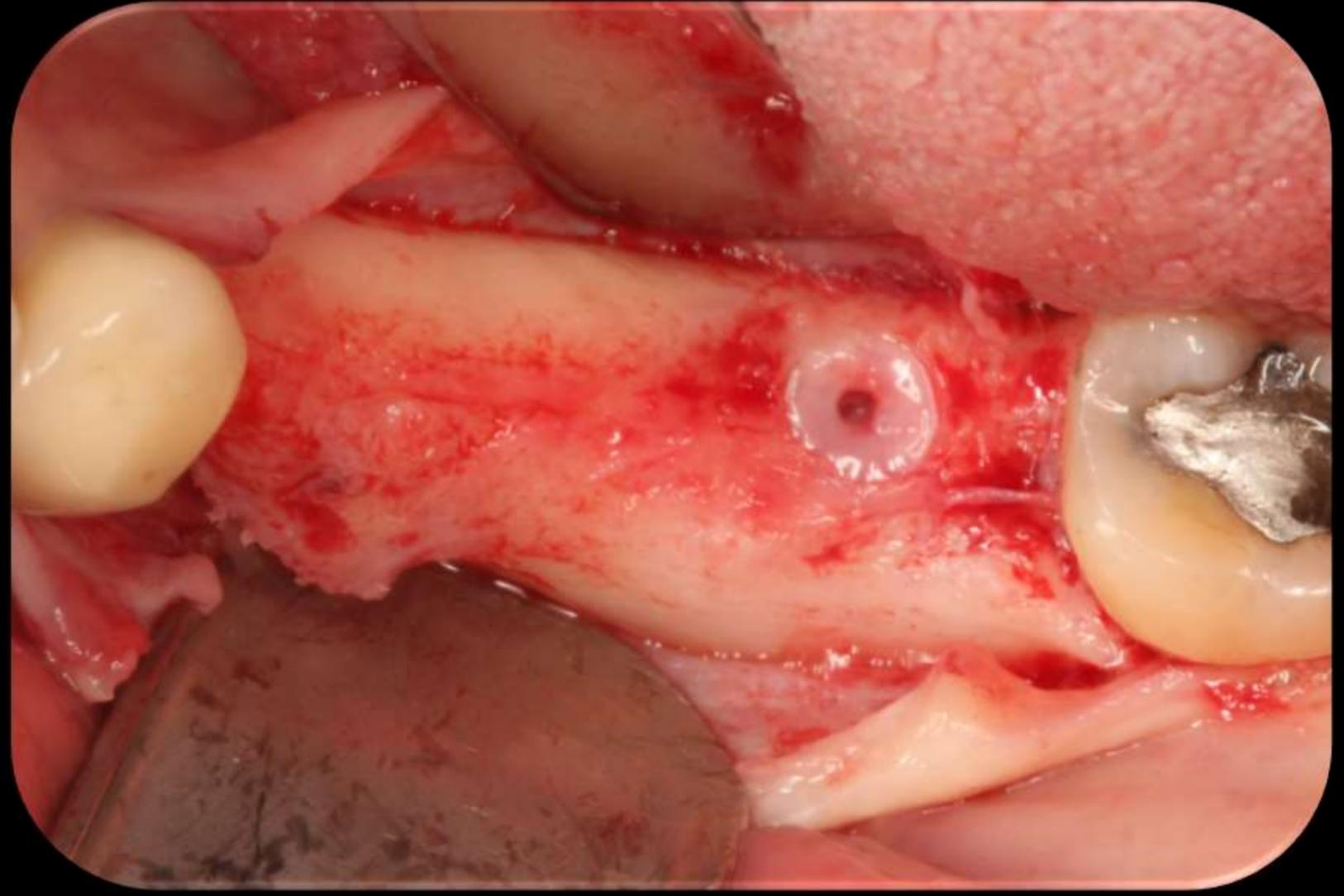
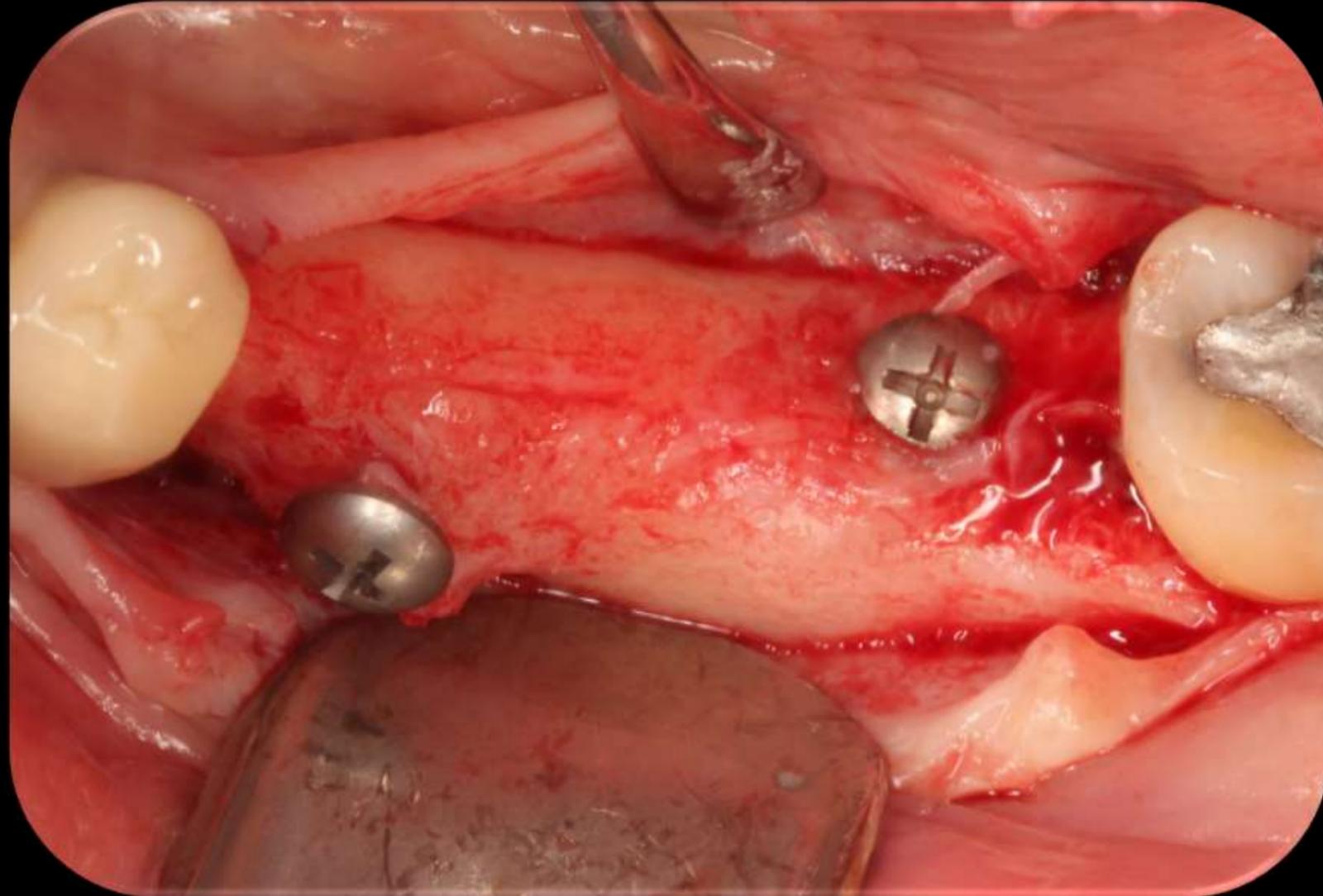
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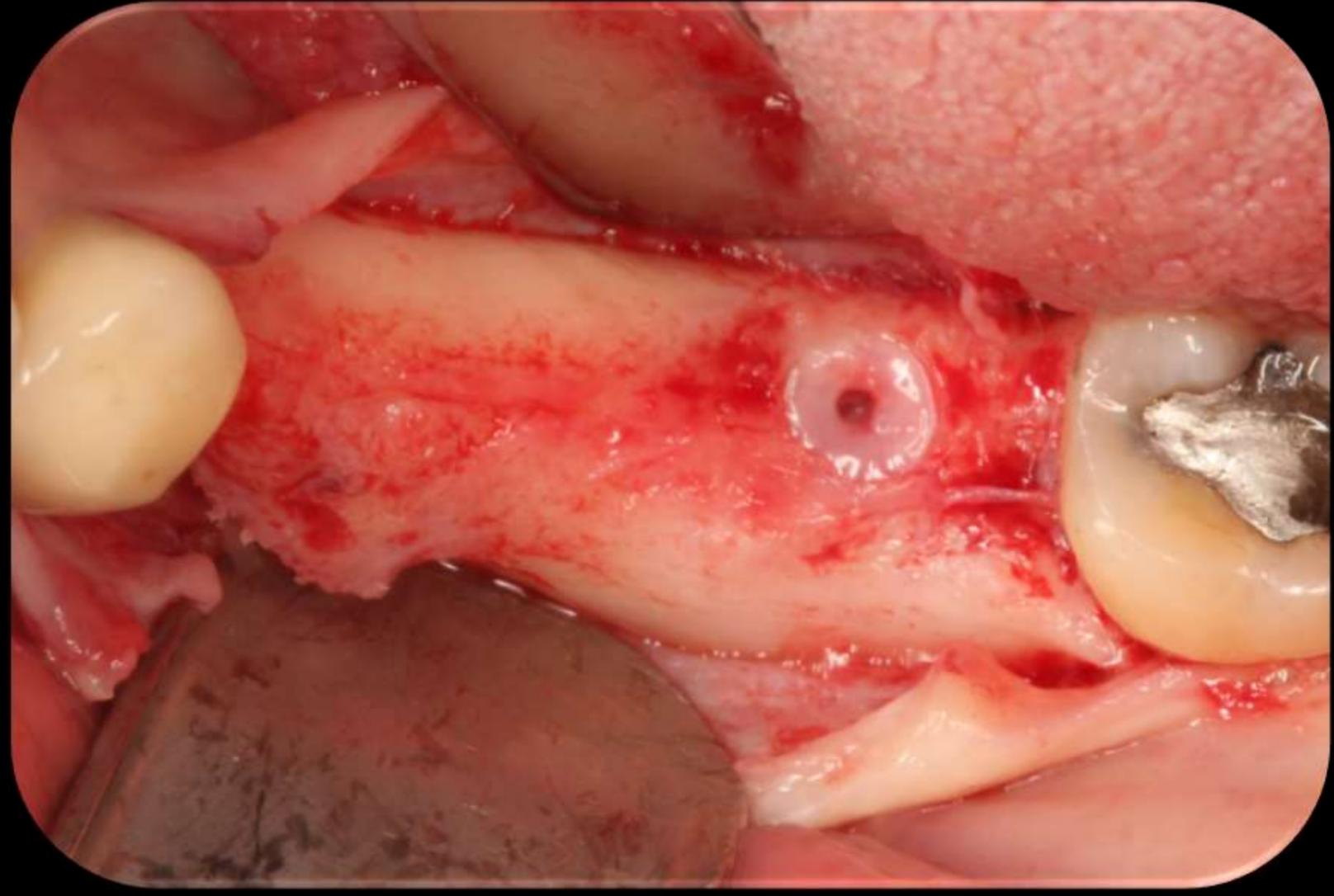
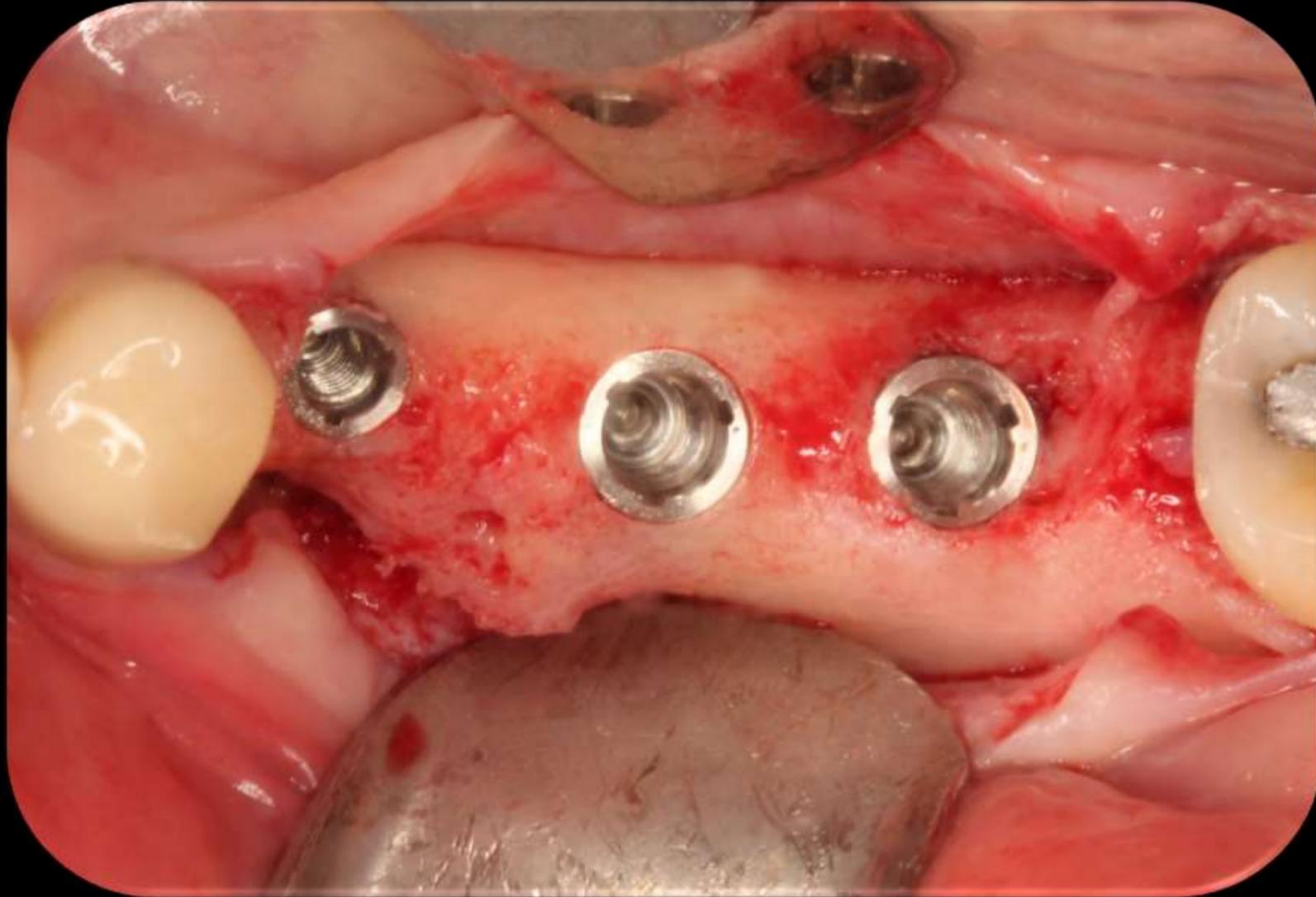
INDICATIONS – DEFECT STABILIZATION



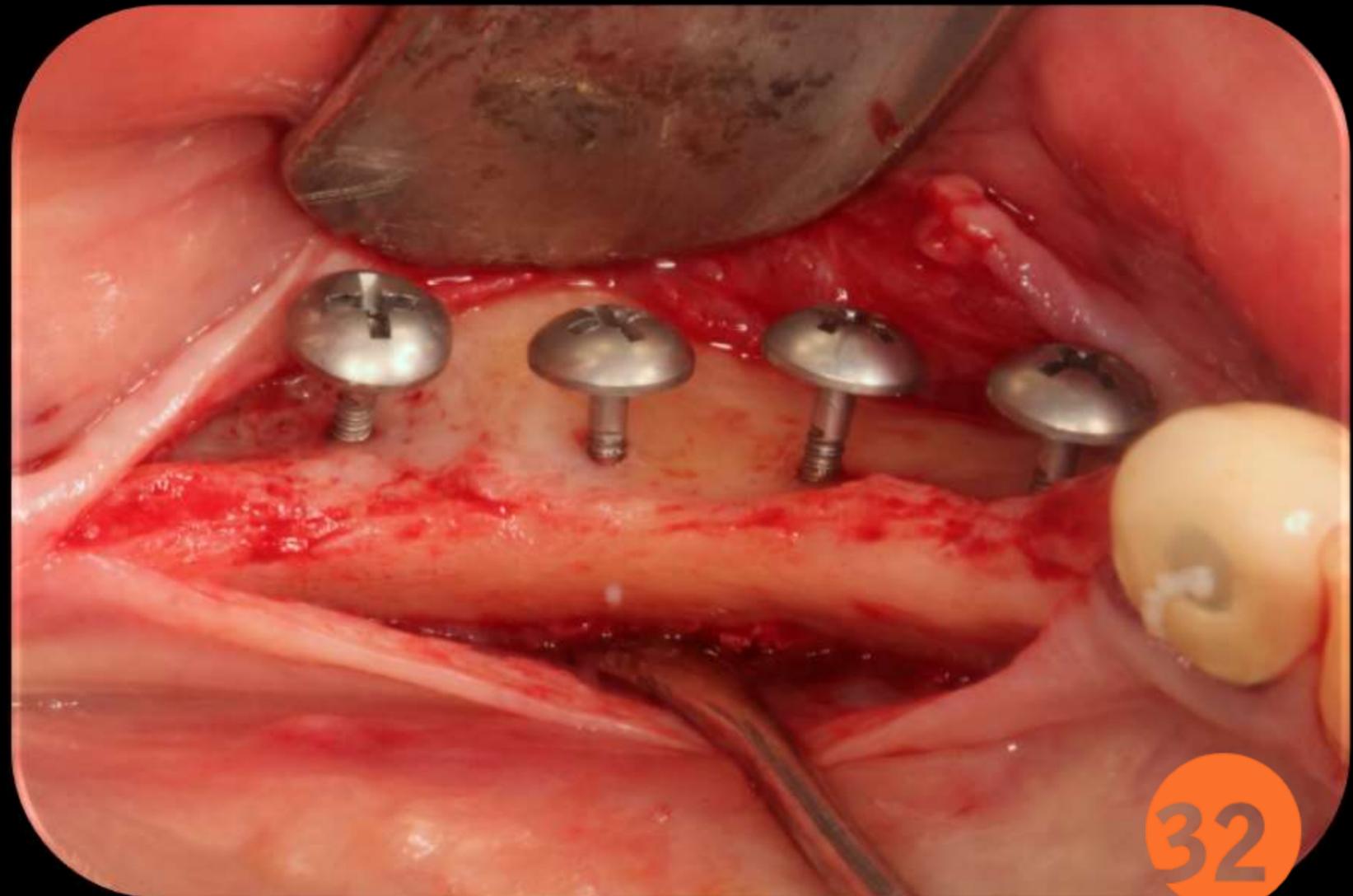
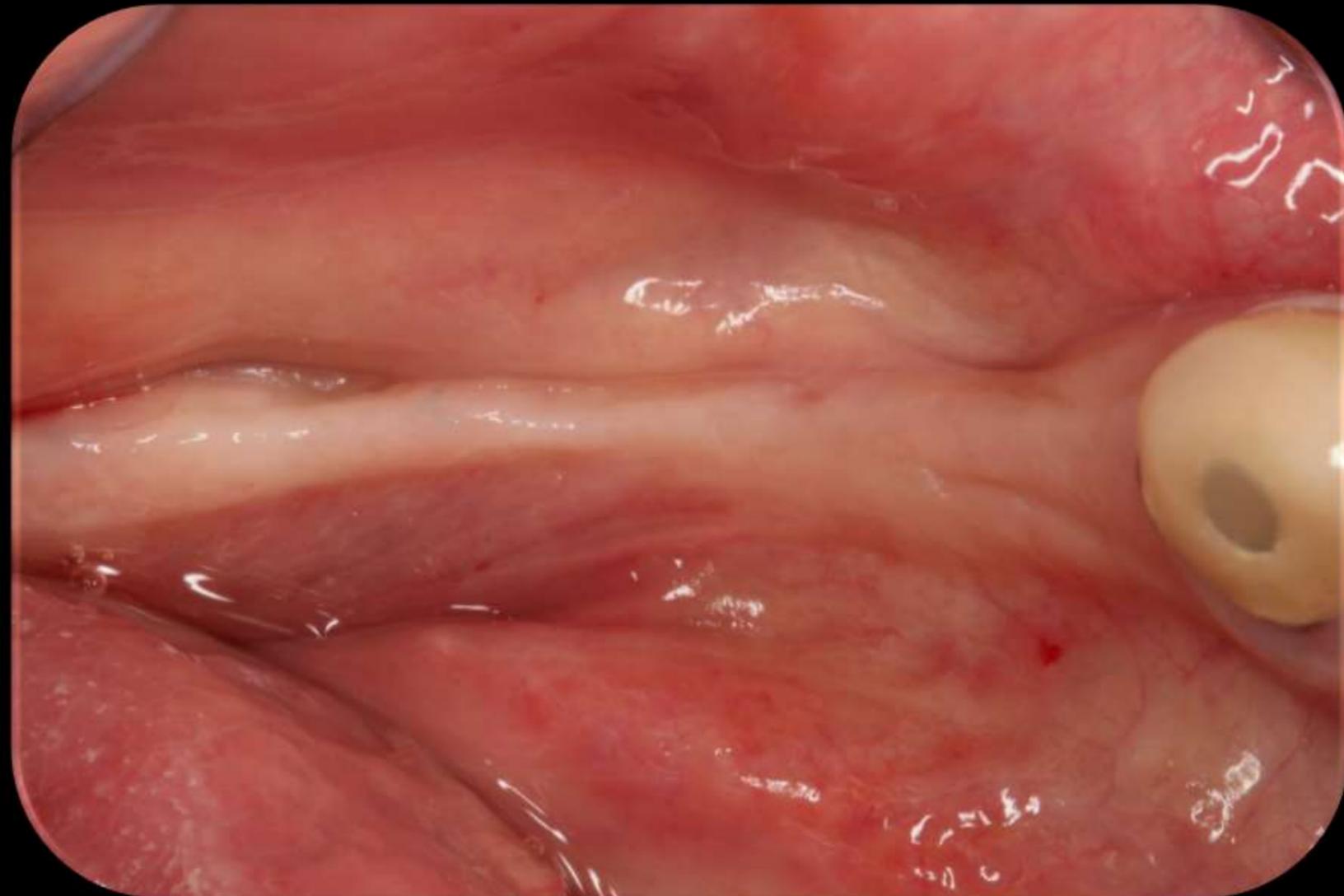
INDICATIONS – DEFECT STABILIZATION



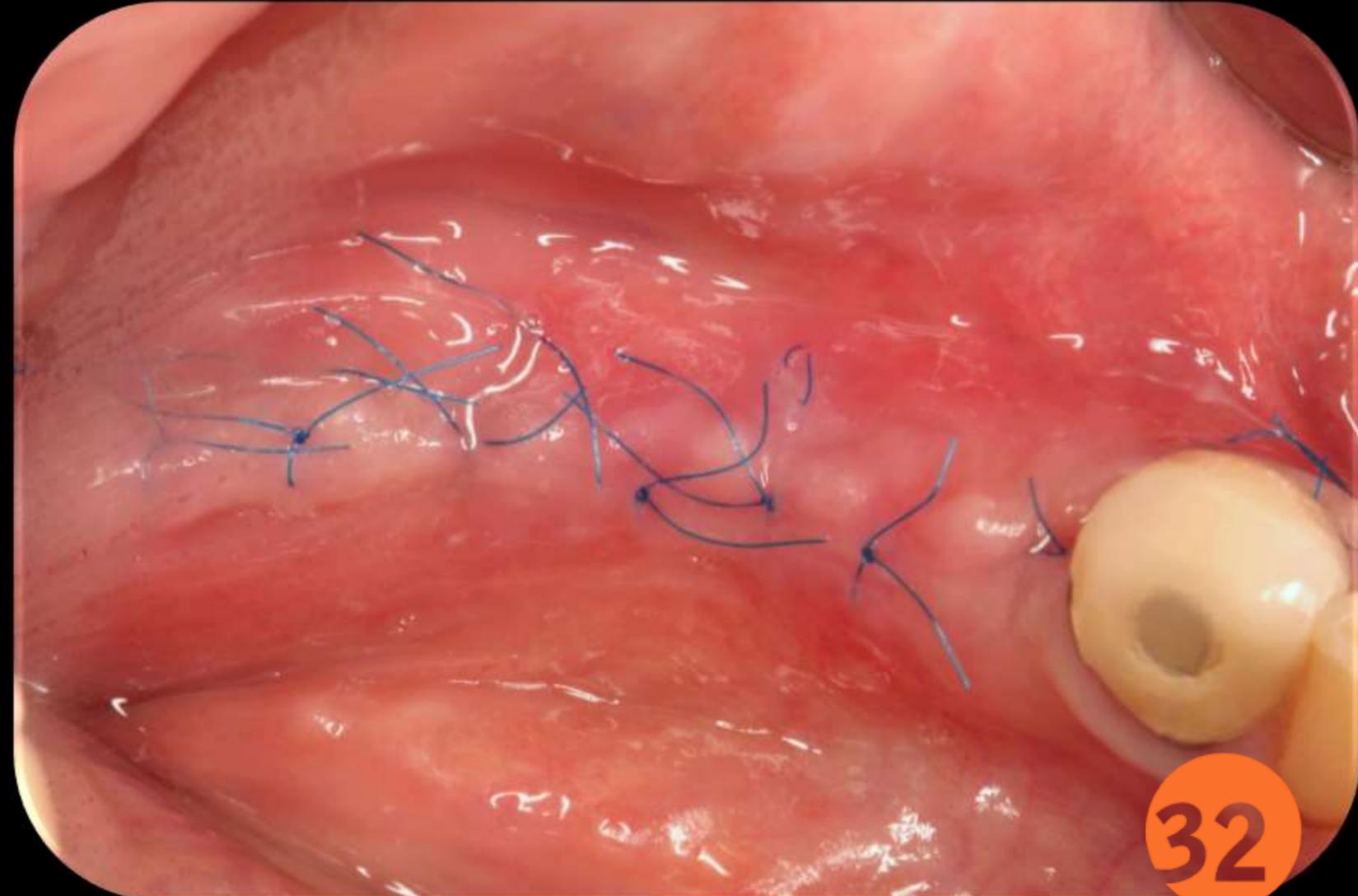
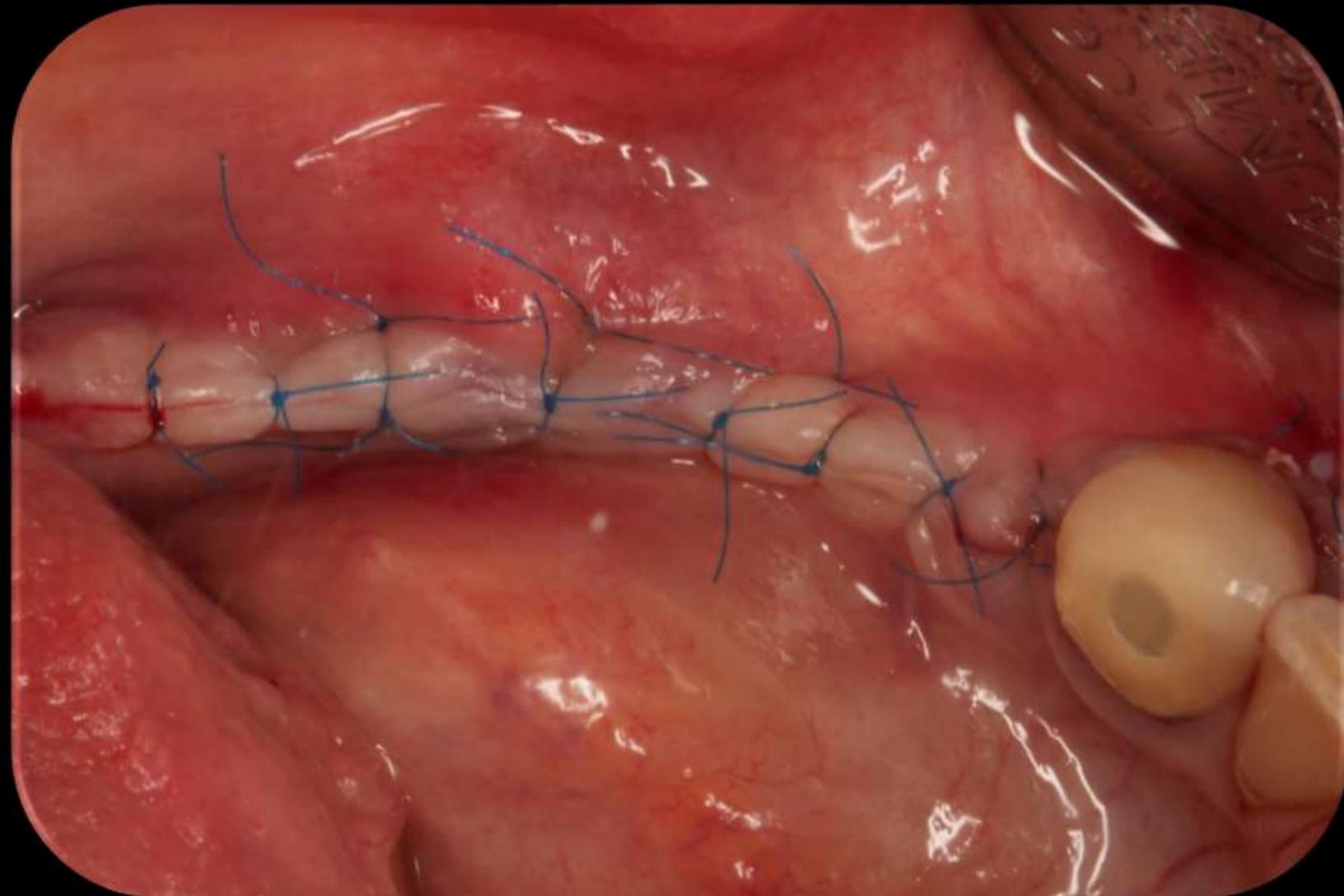
INDICATIONS – DEFECT STABILIZATION



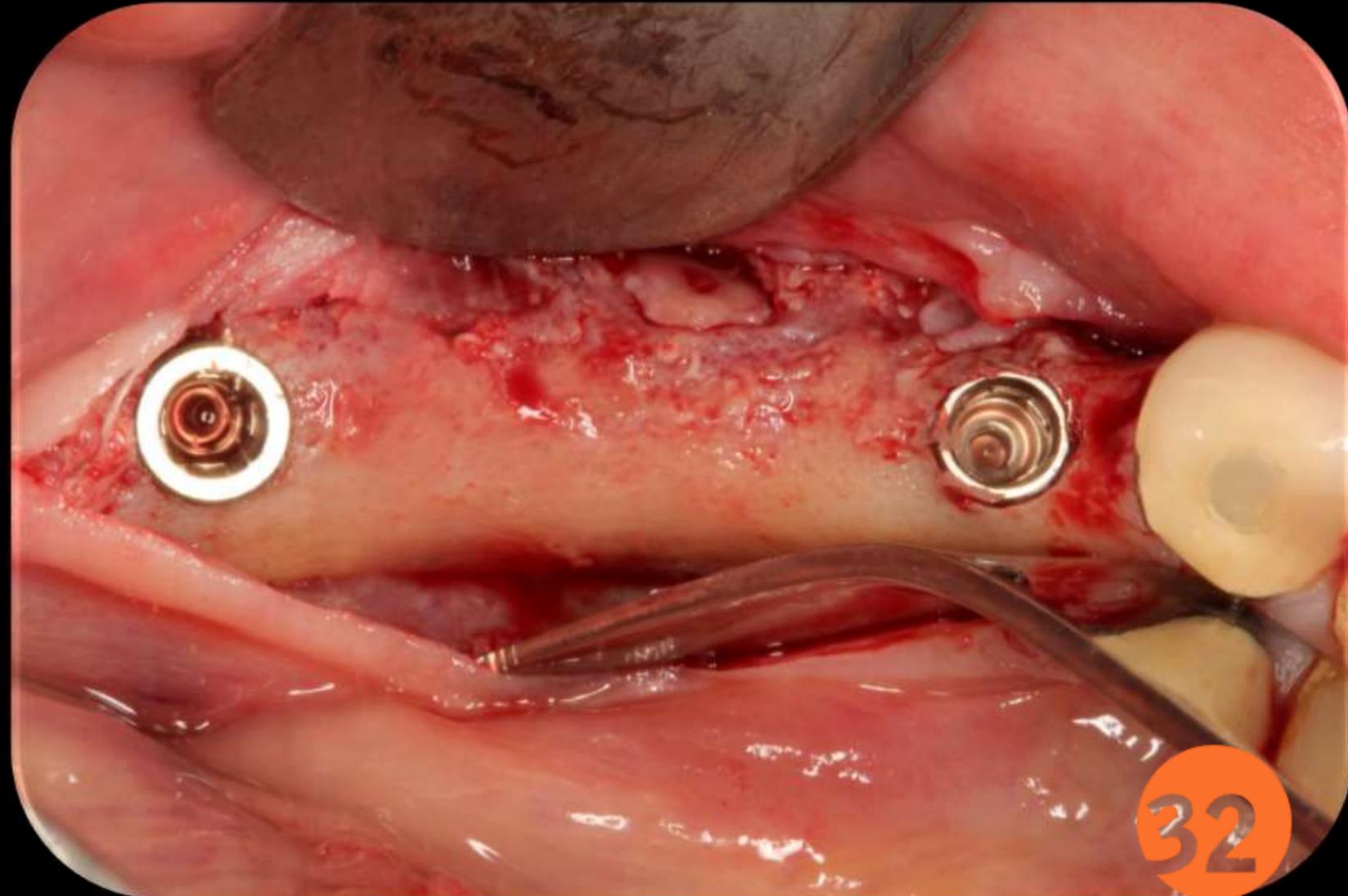
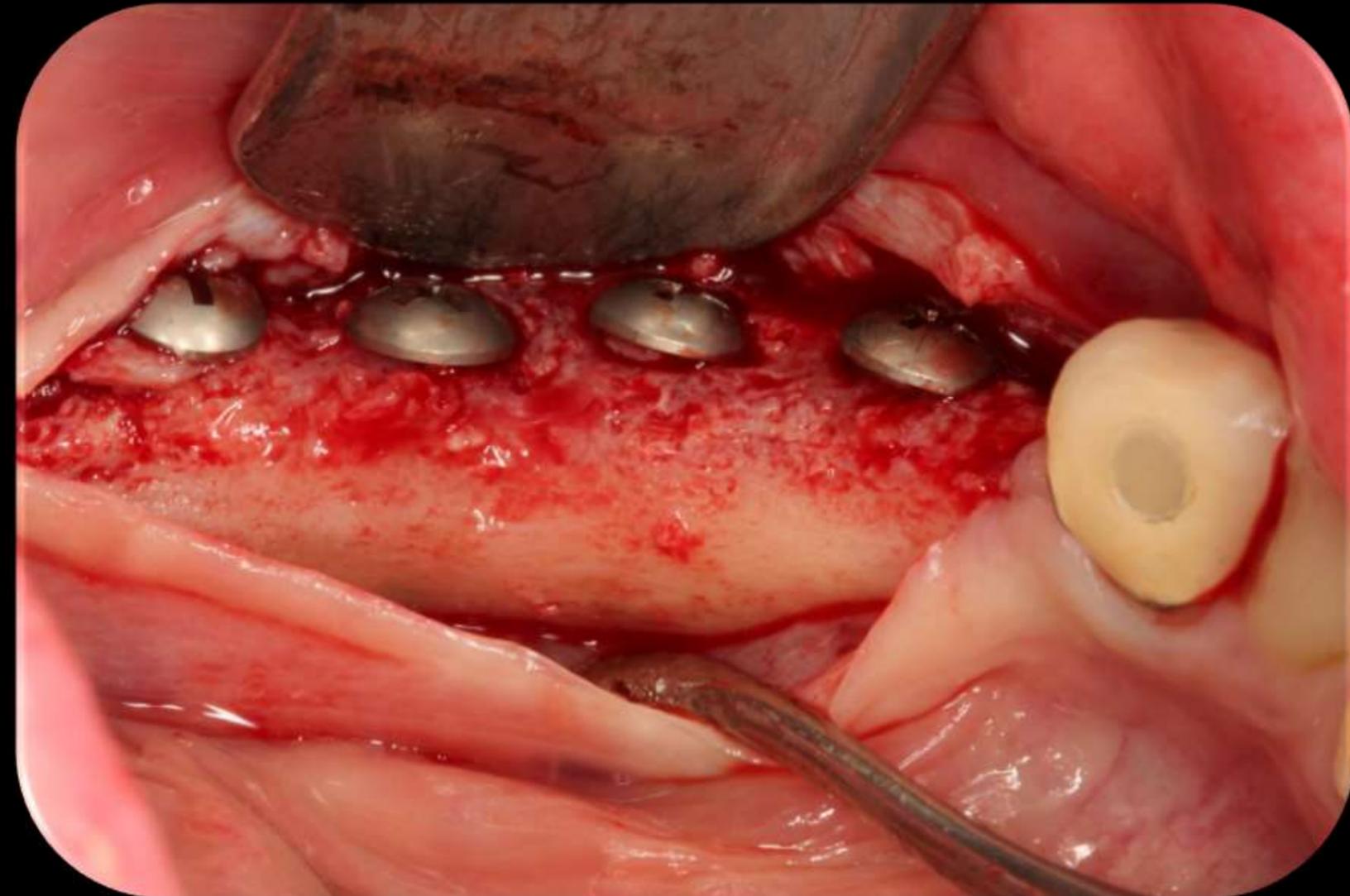
INDICATIONS – HORIZONTAL AUGMENTATION



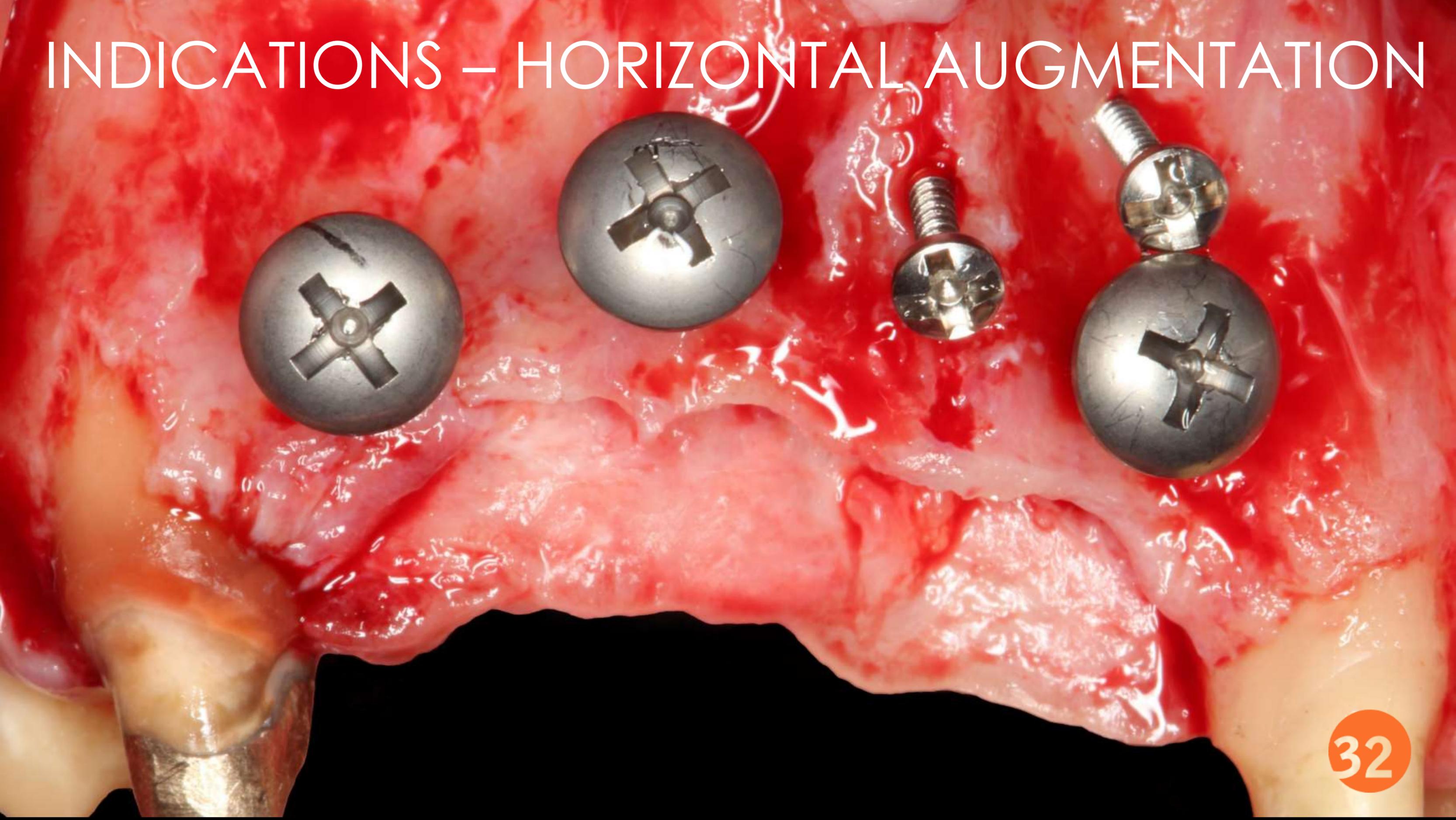
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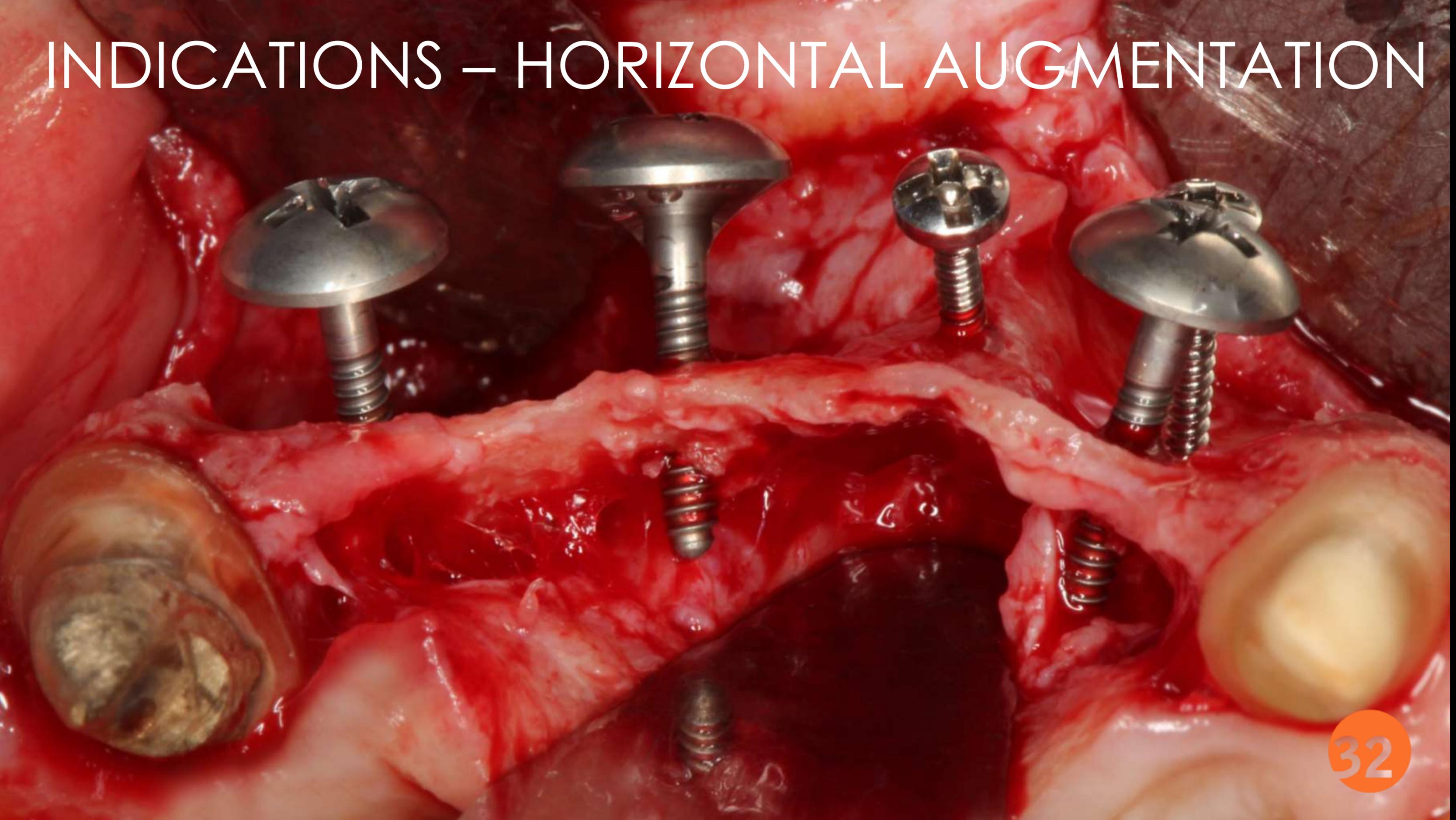
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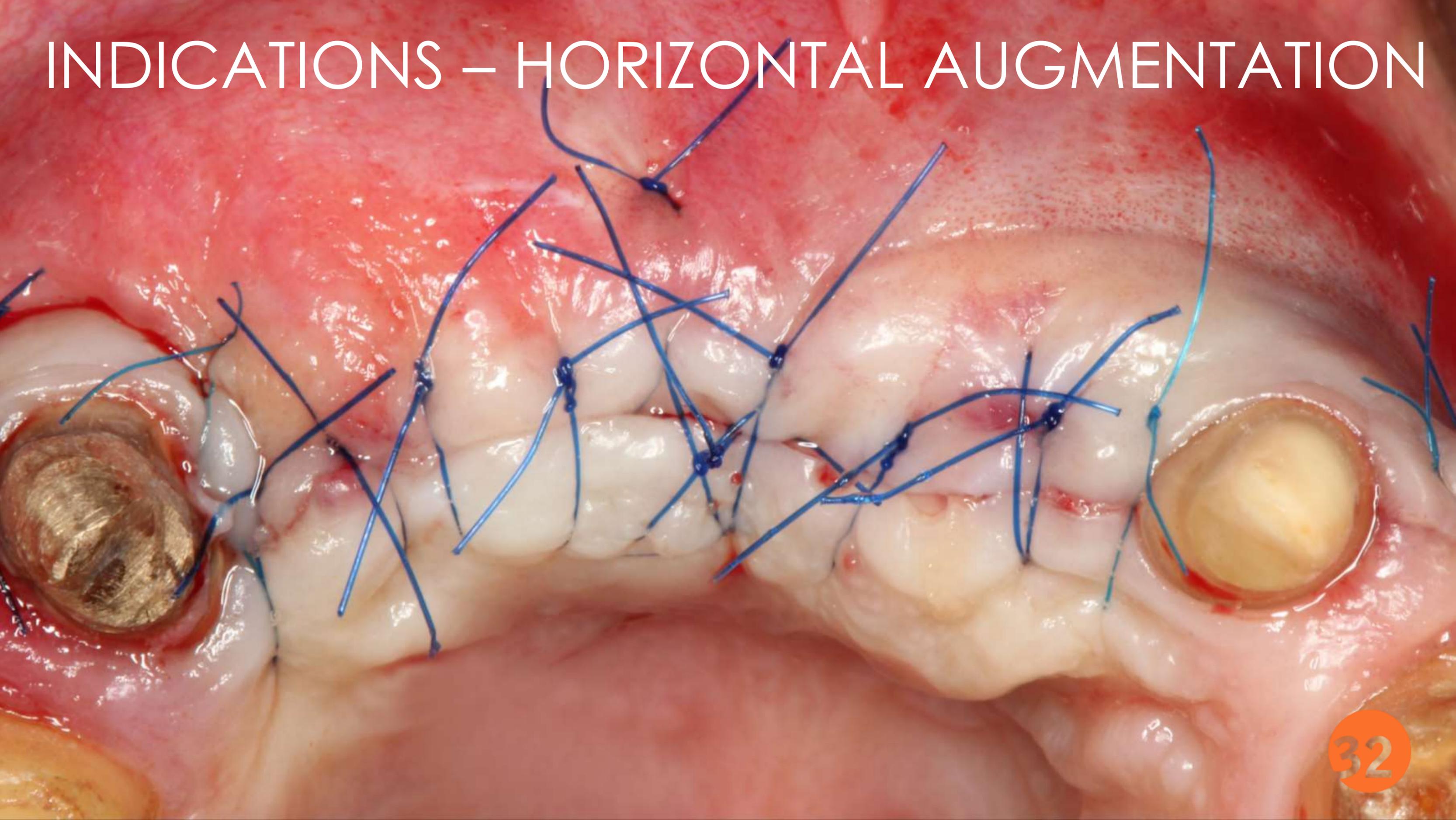
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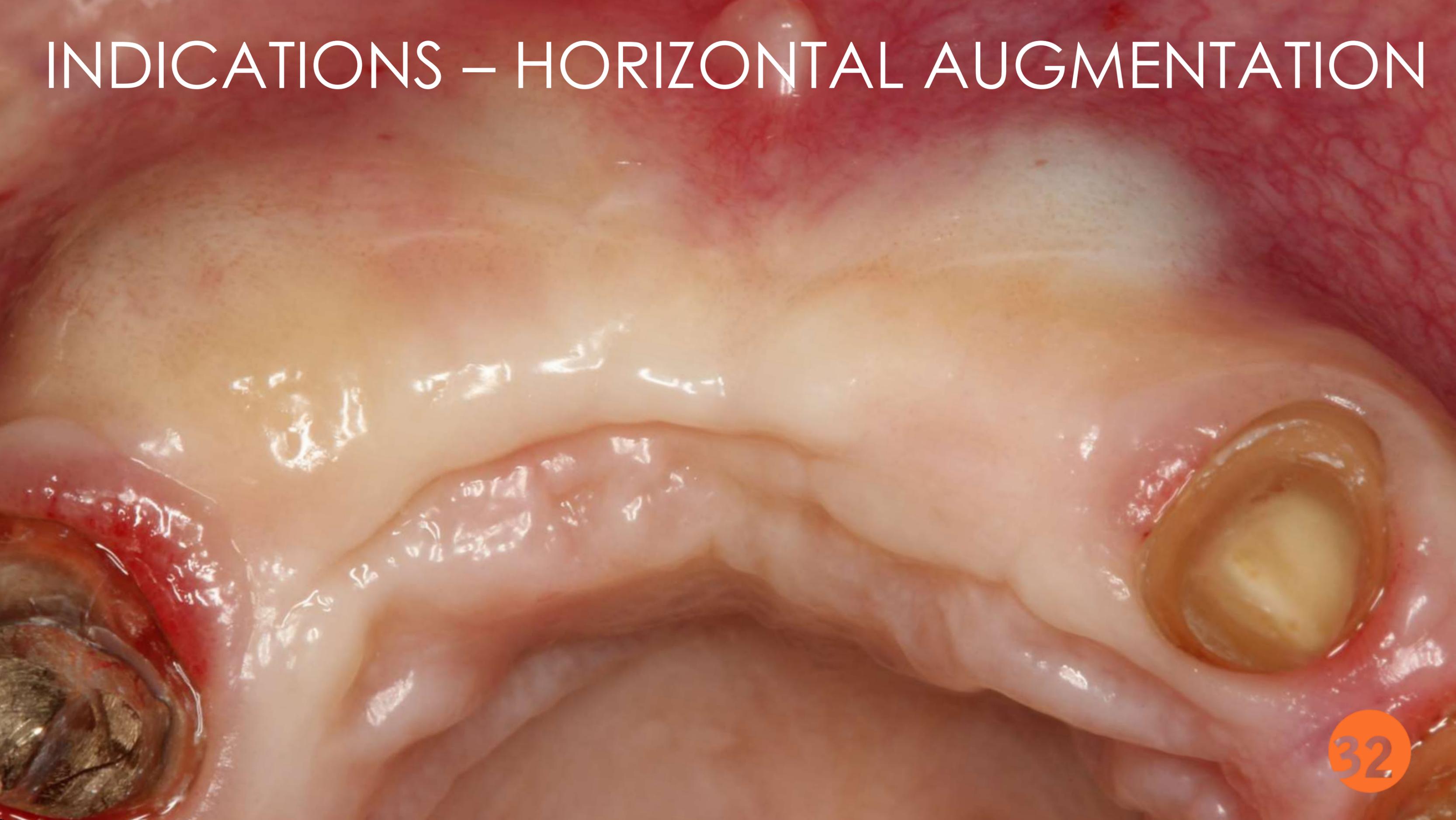
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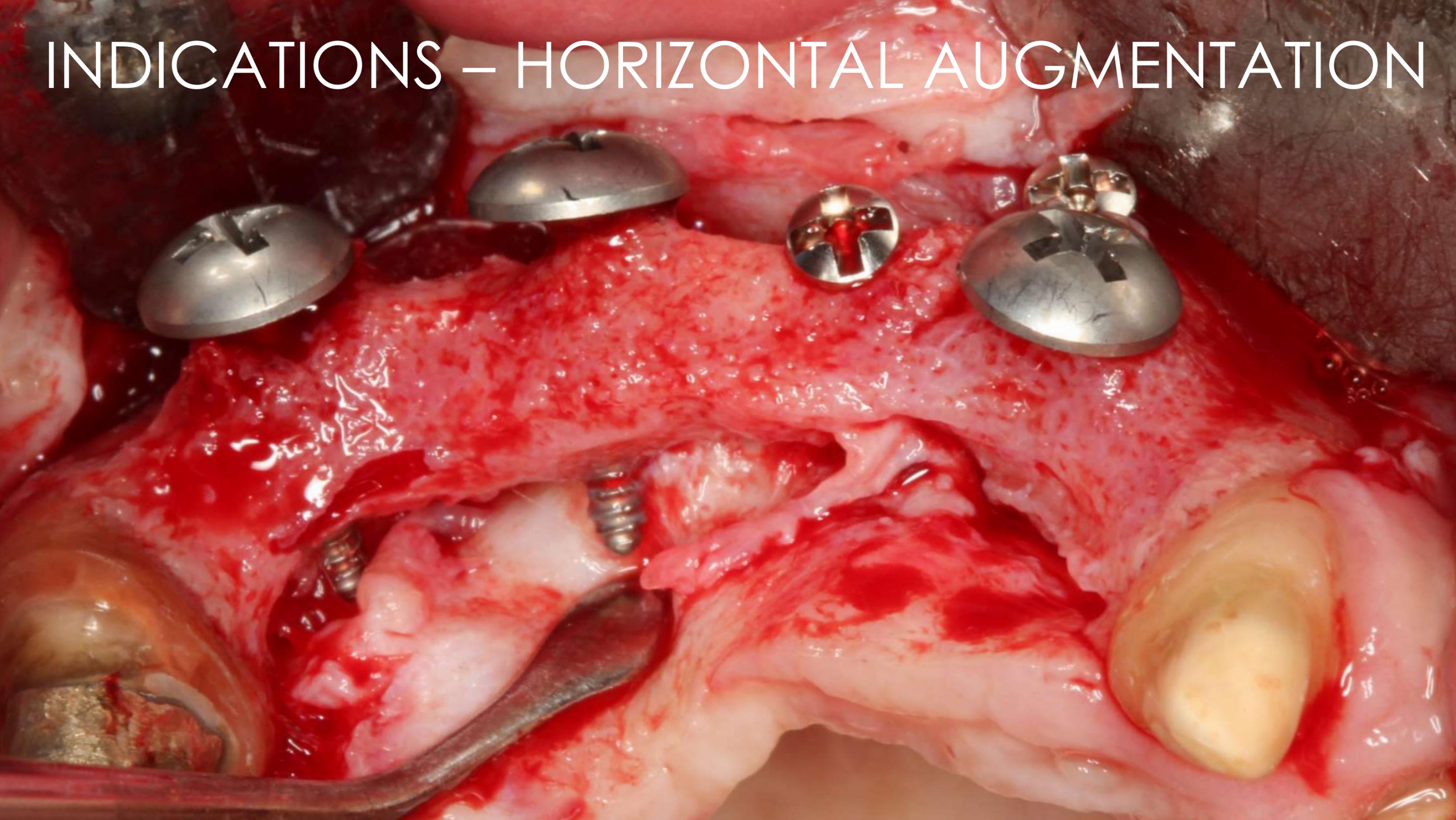
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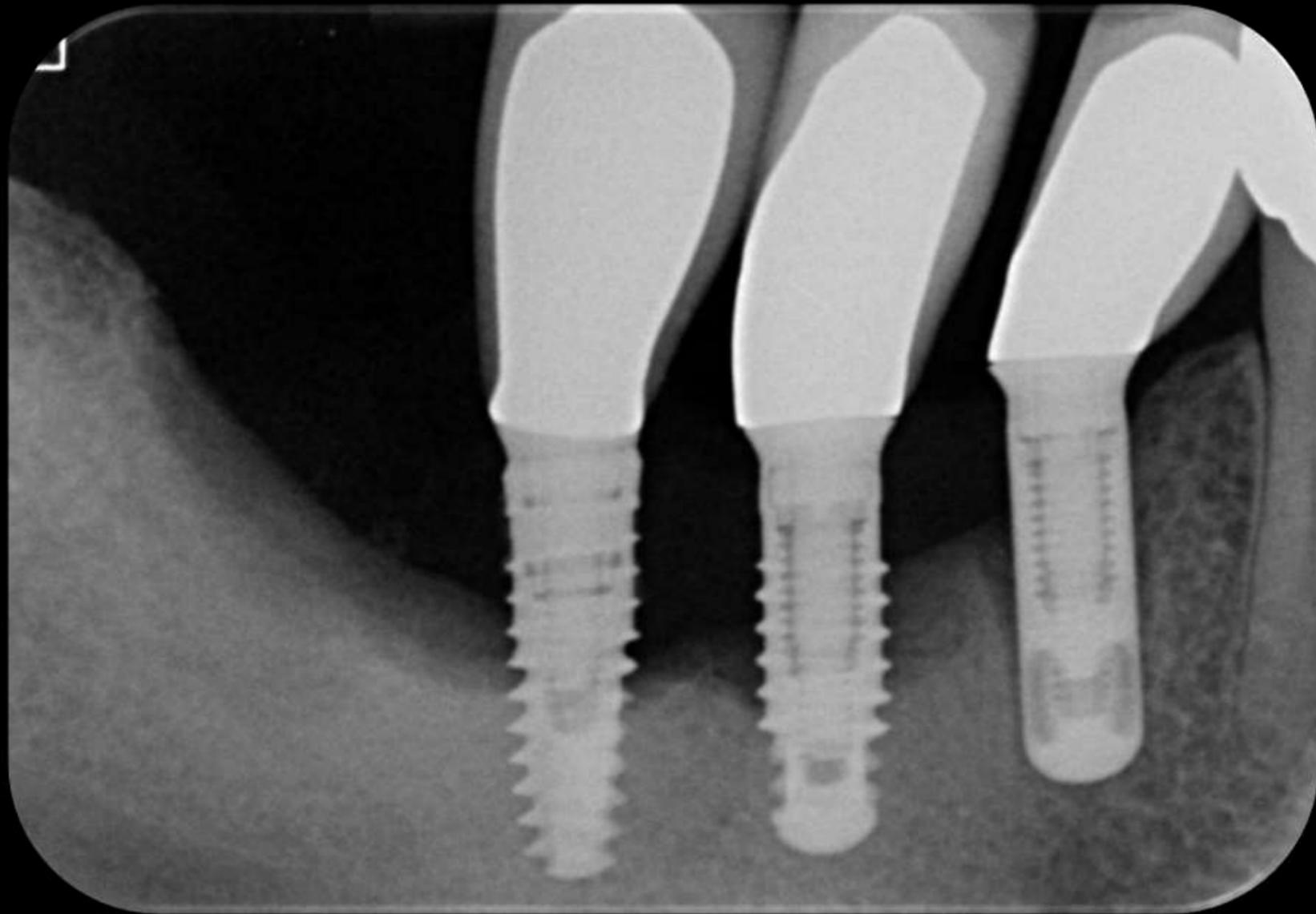
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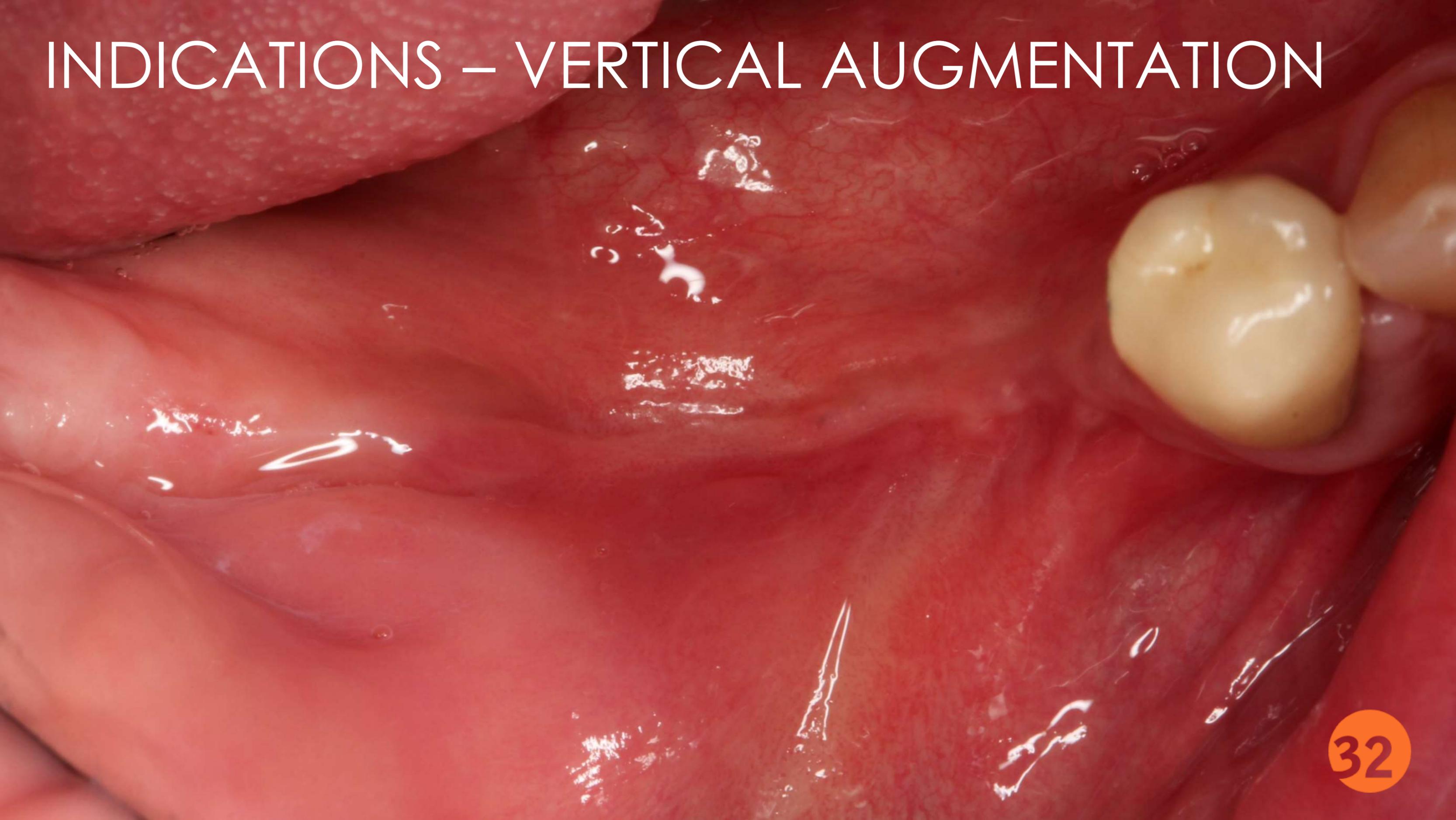
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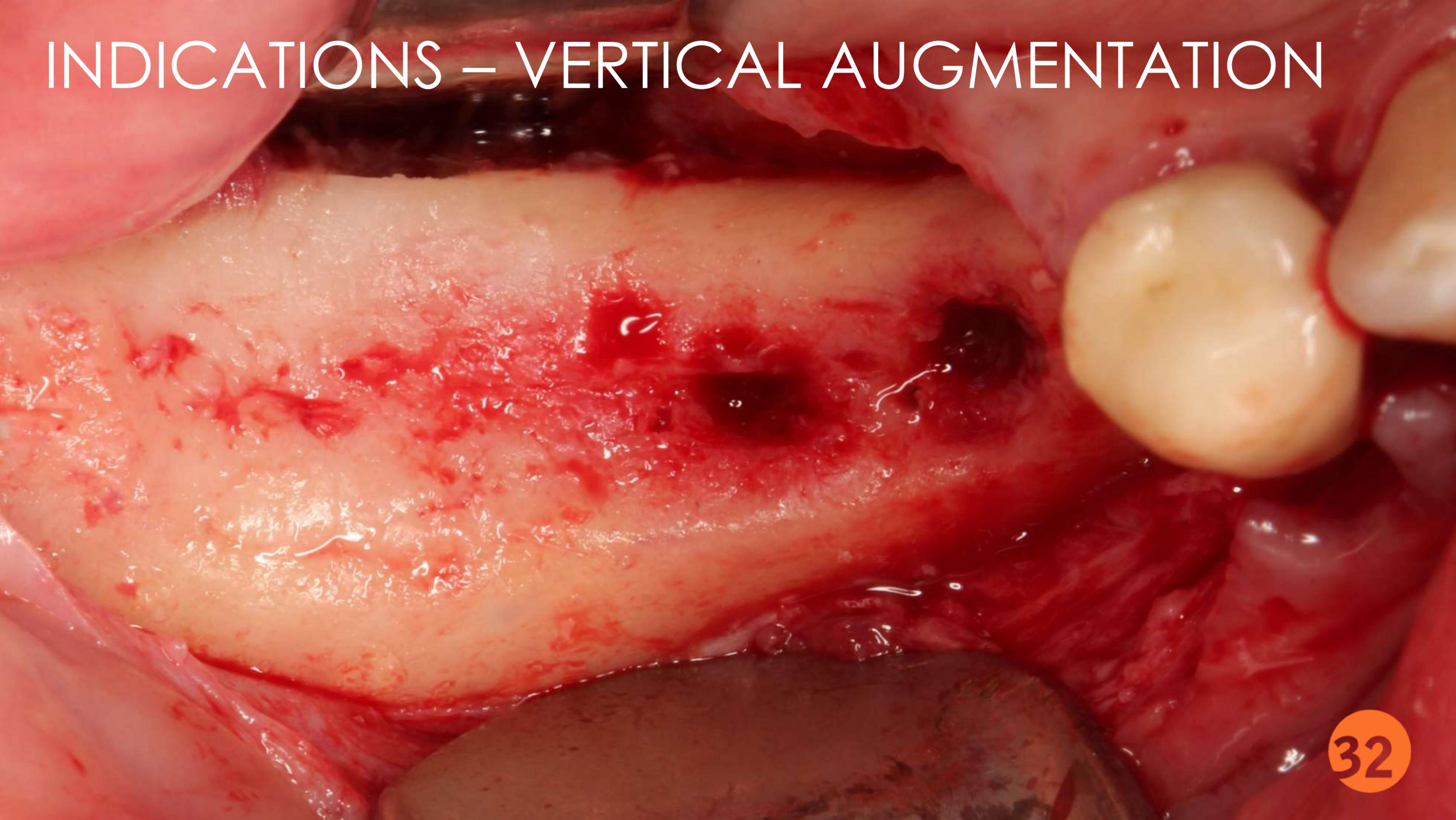
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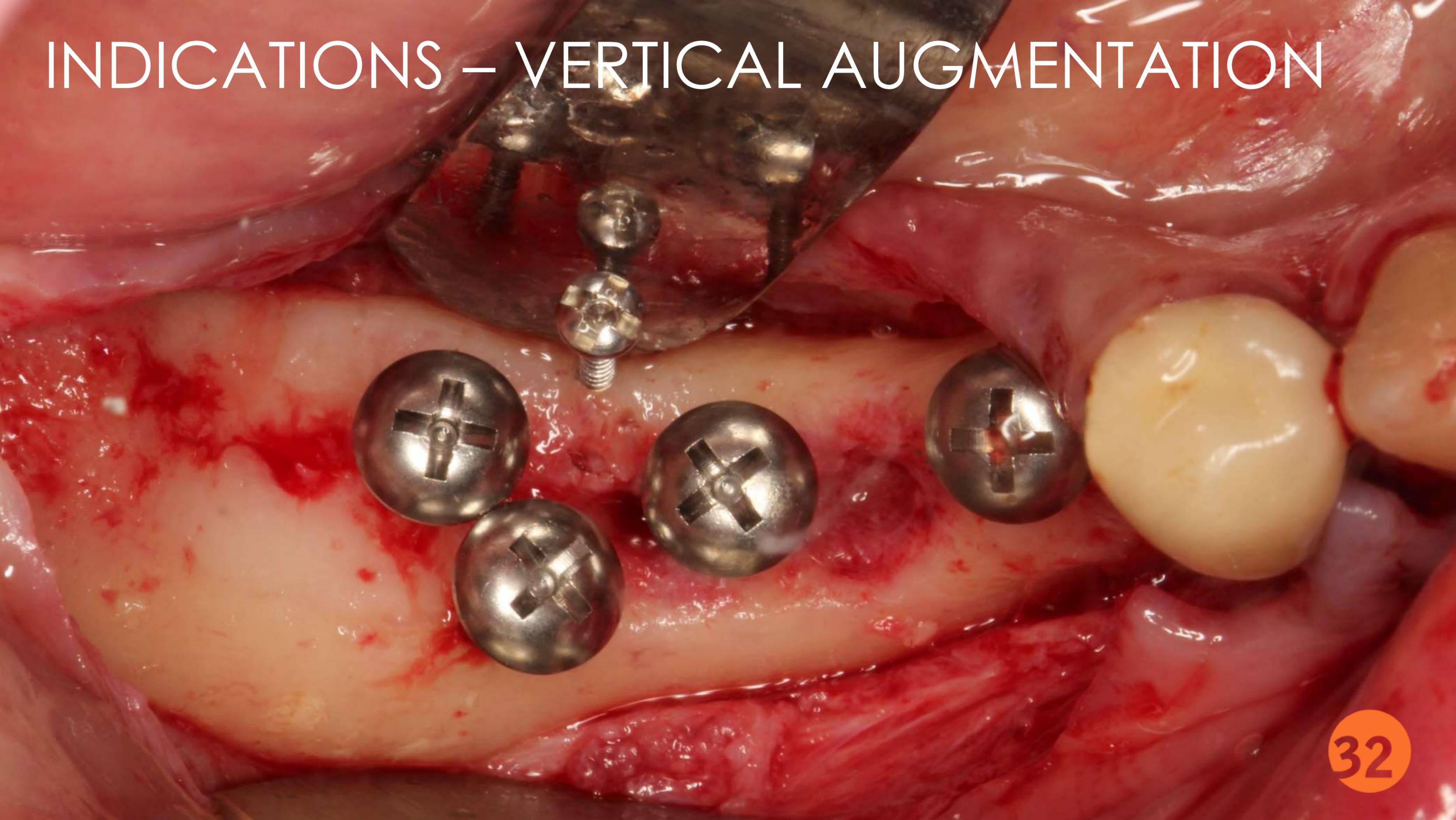
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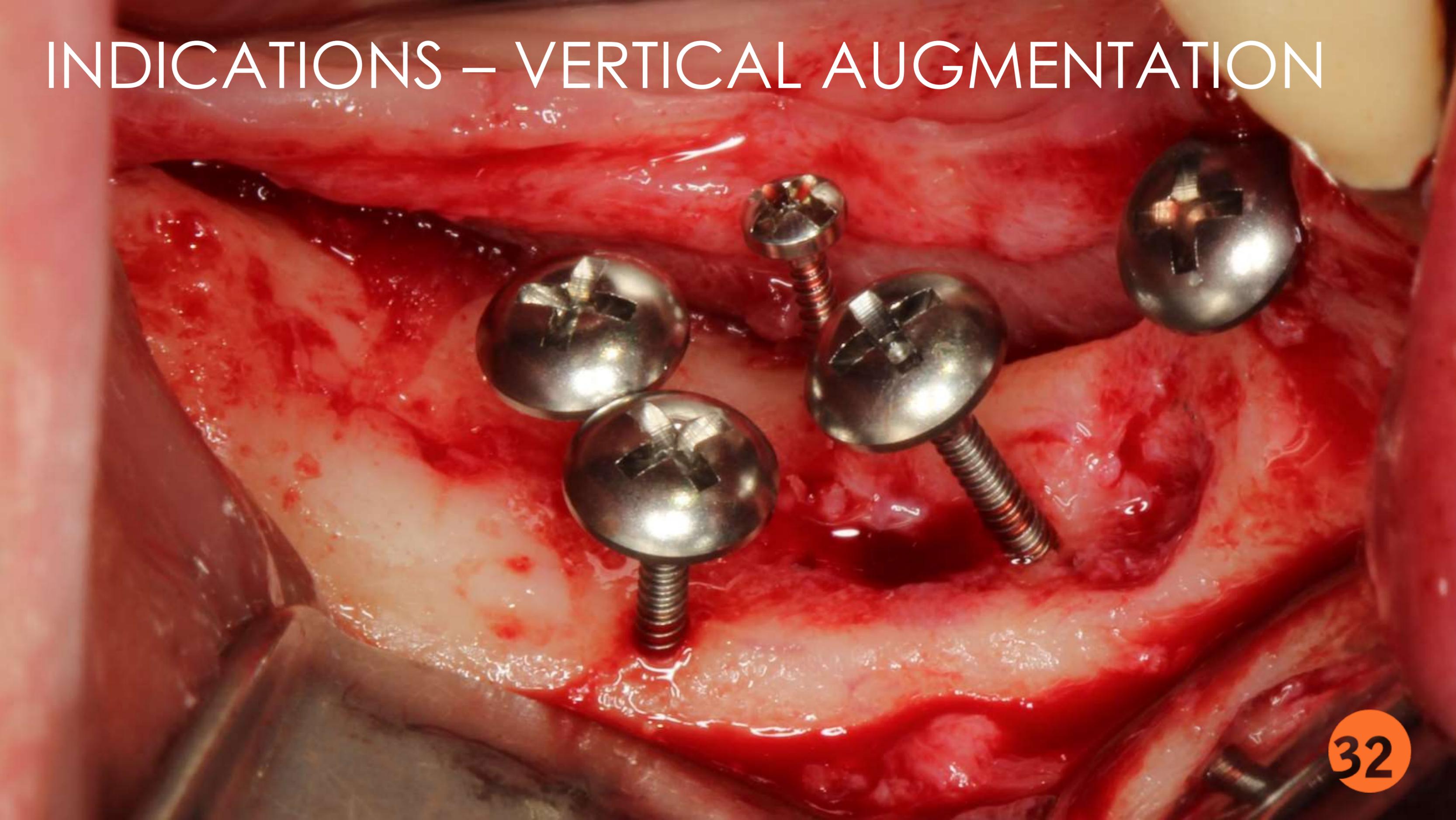
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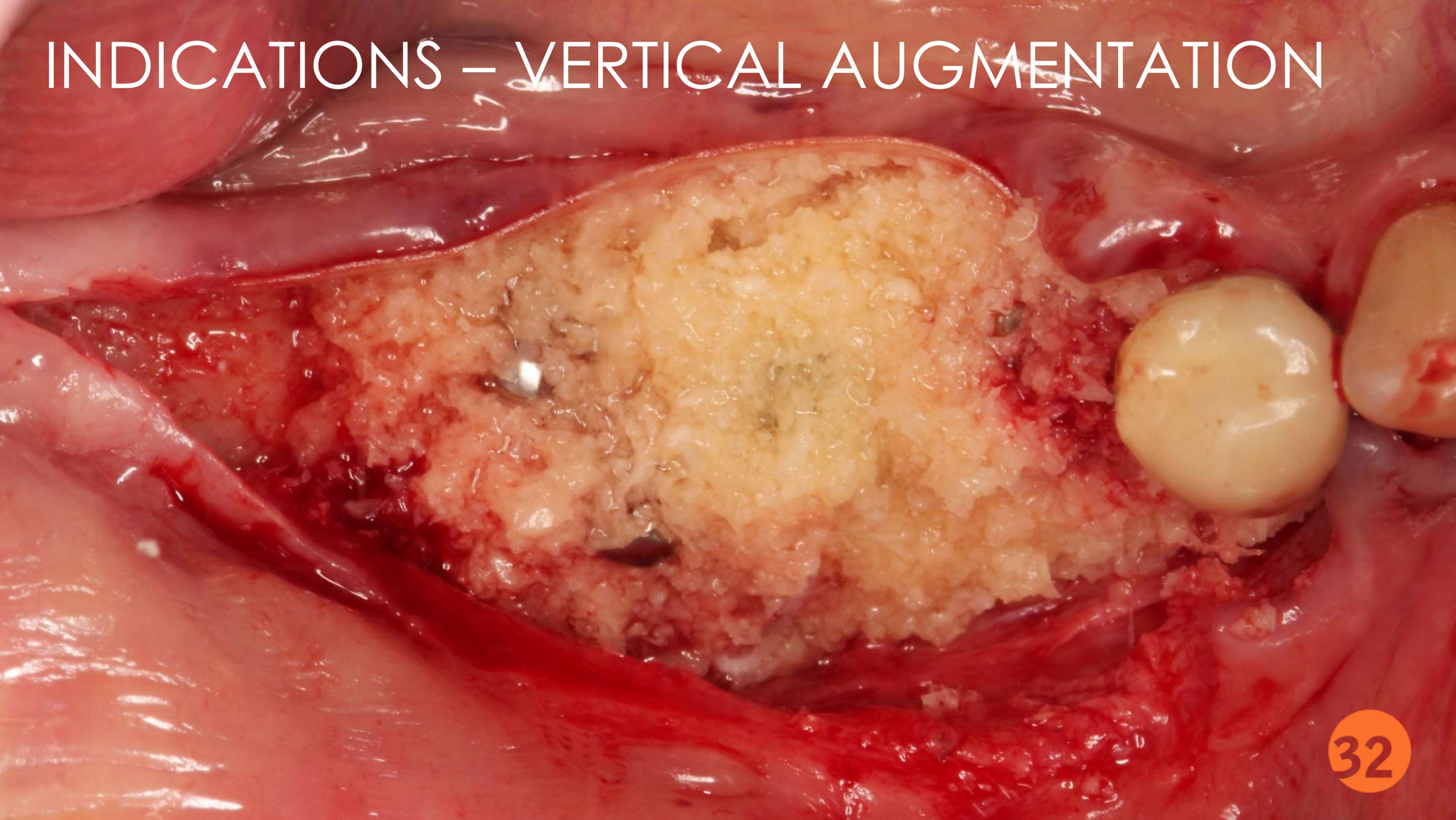
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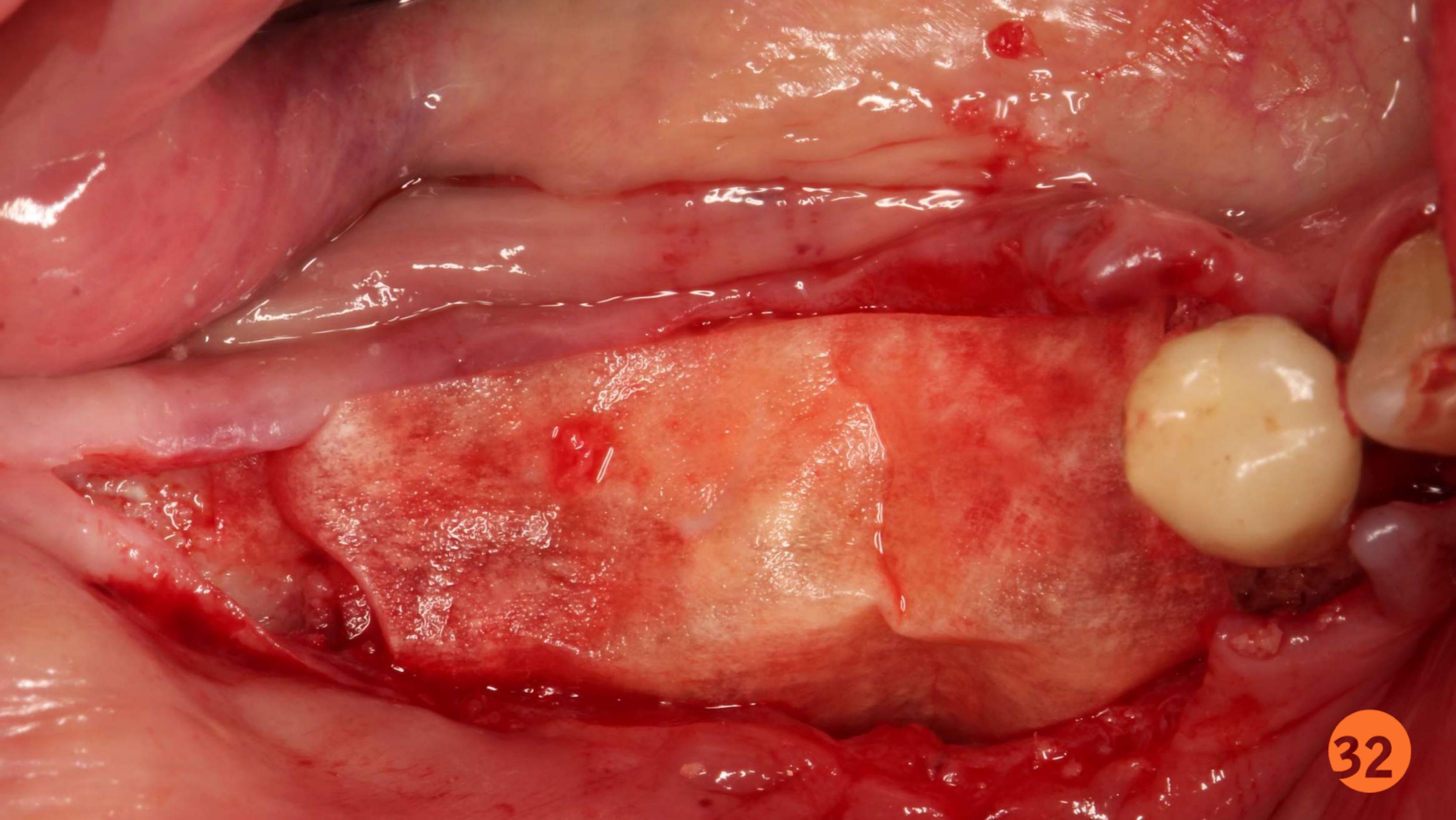


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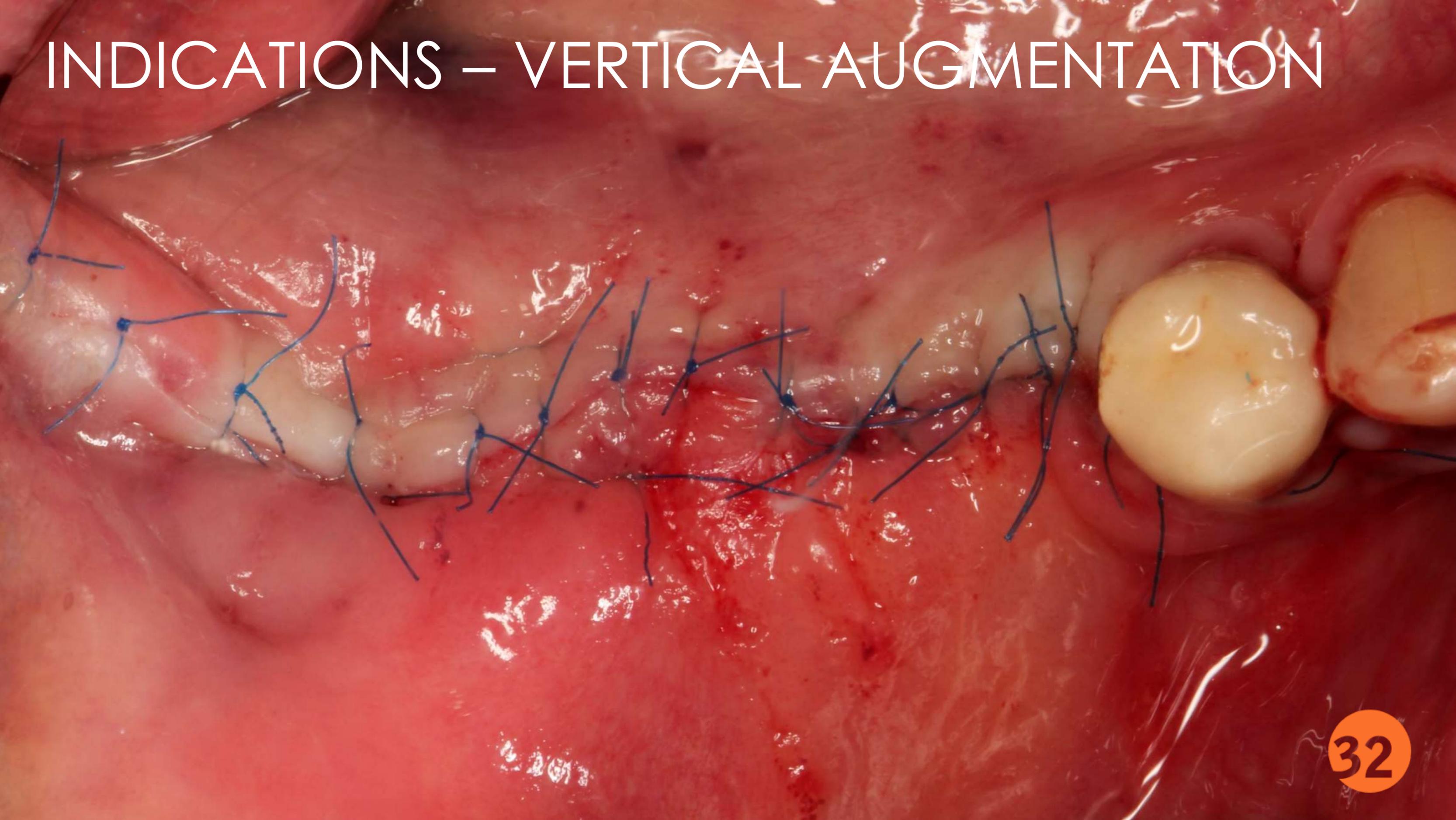


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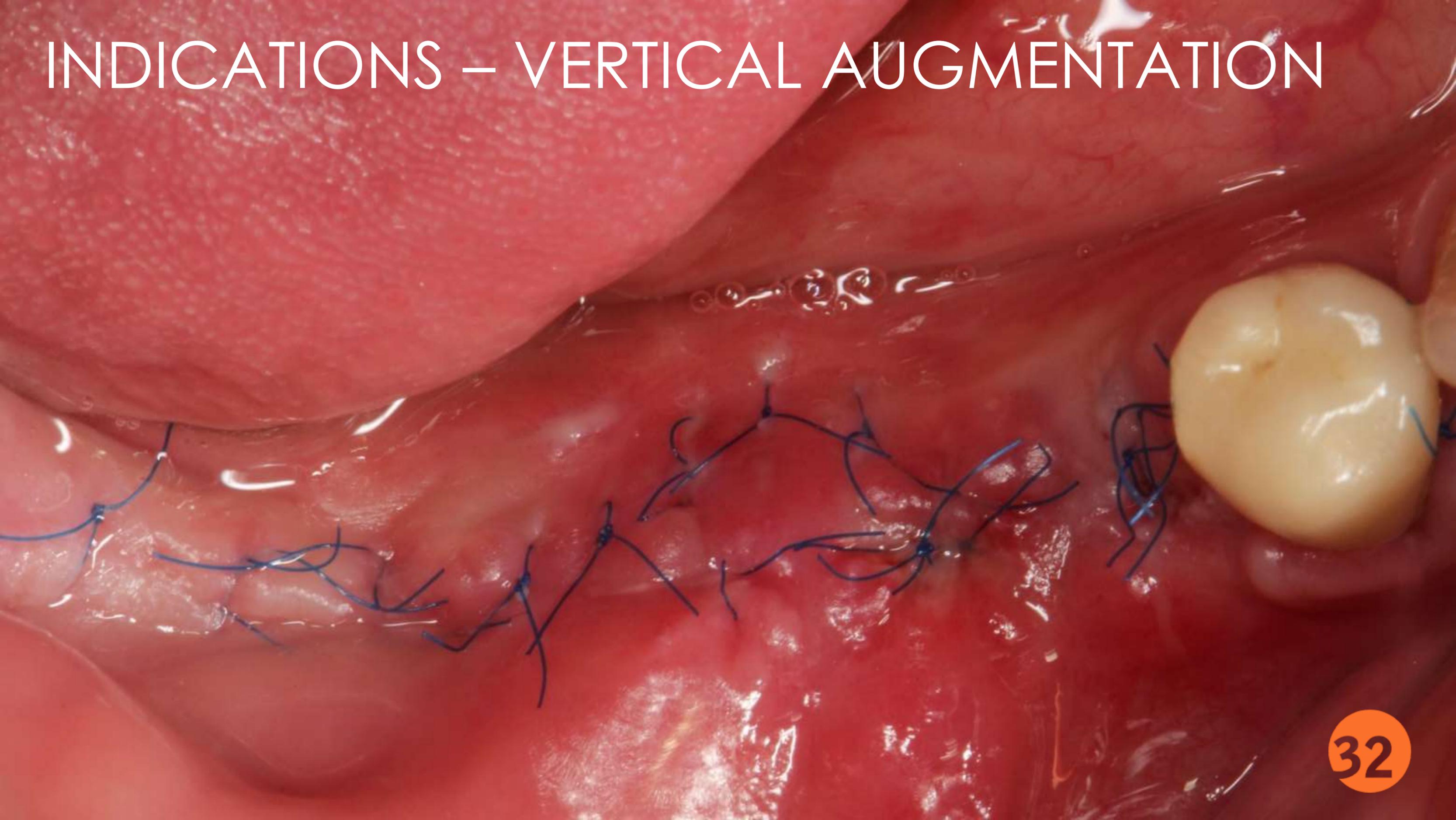




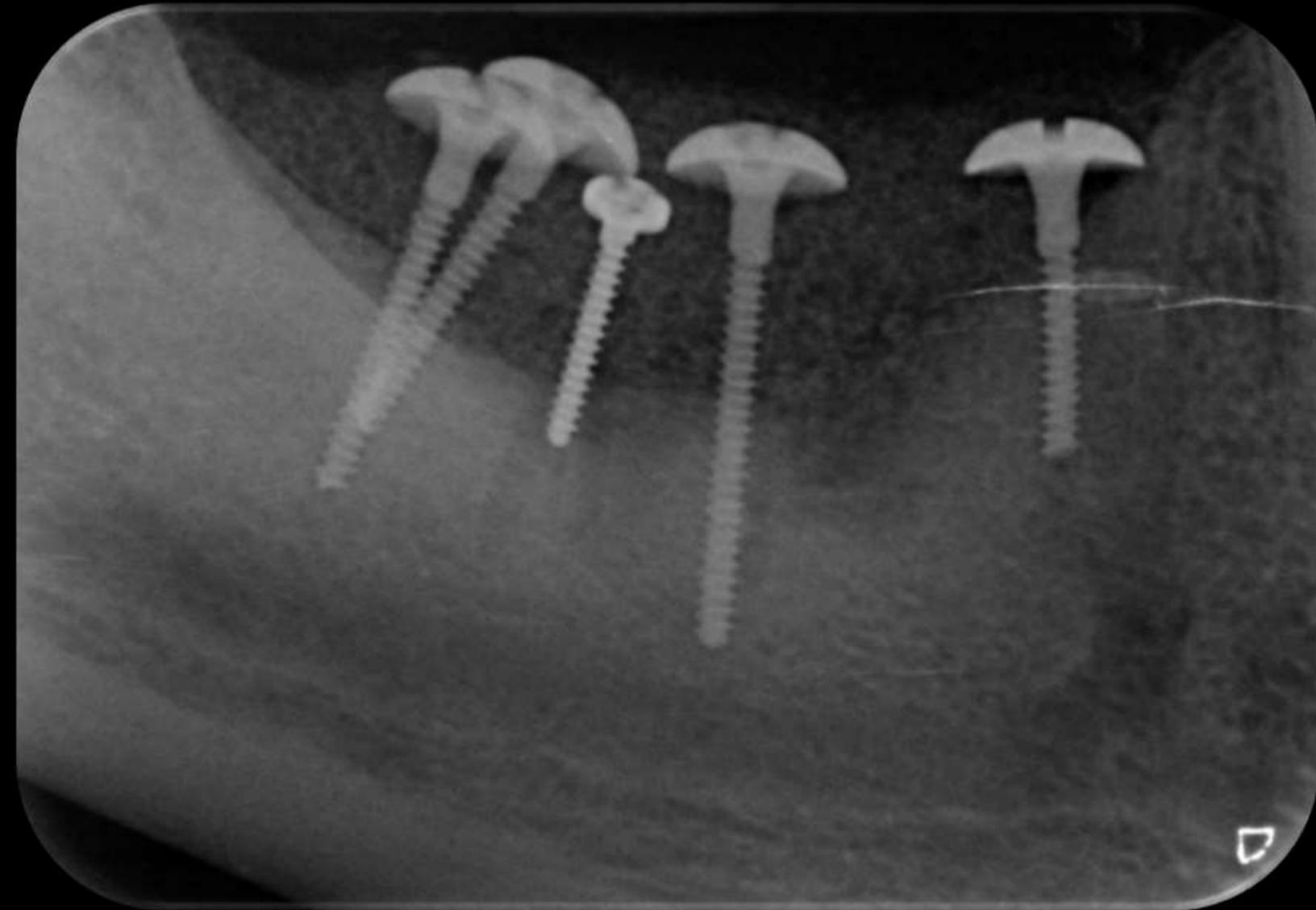
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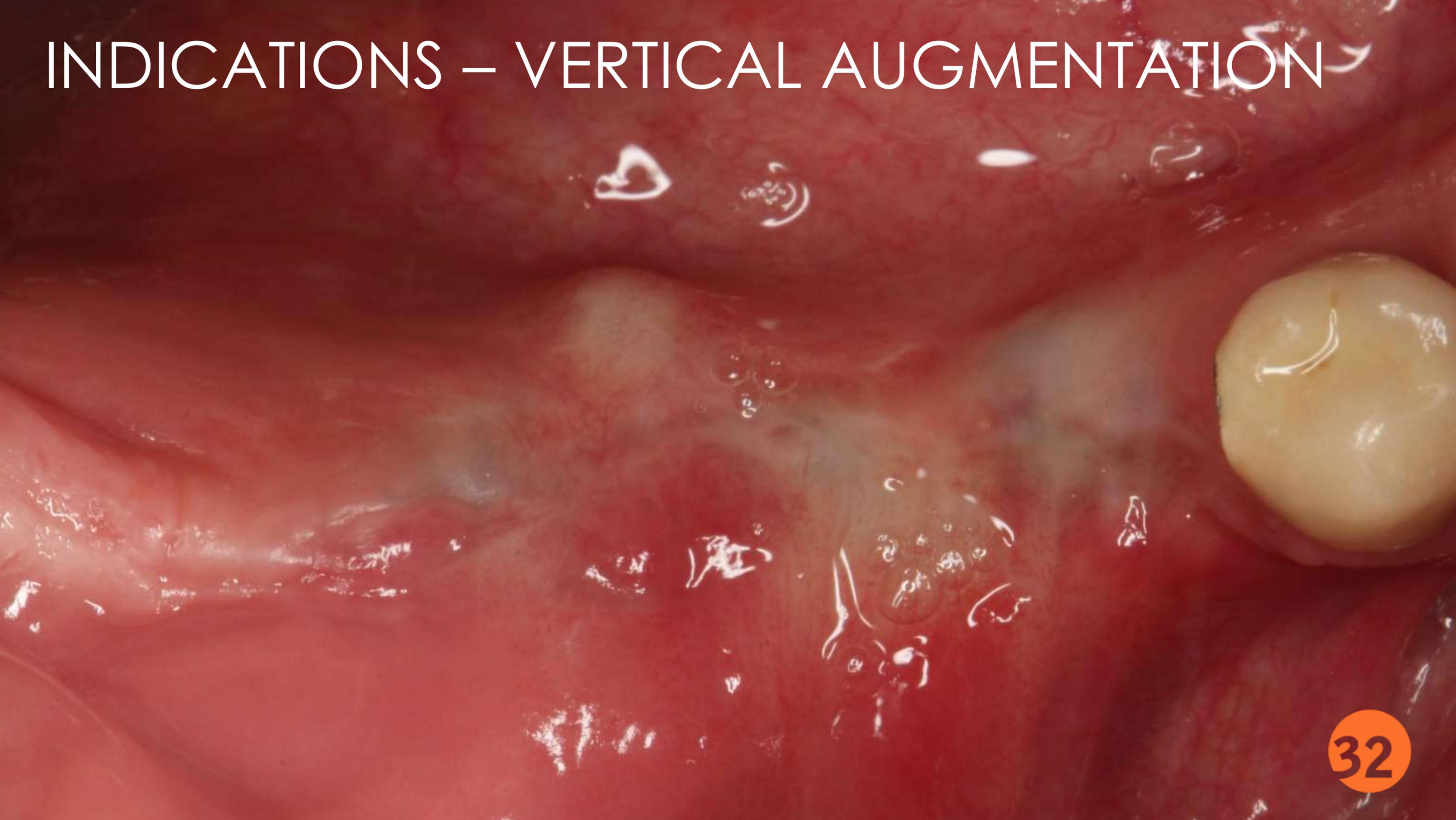
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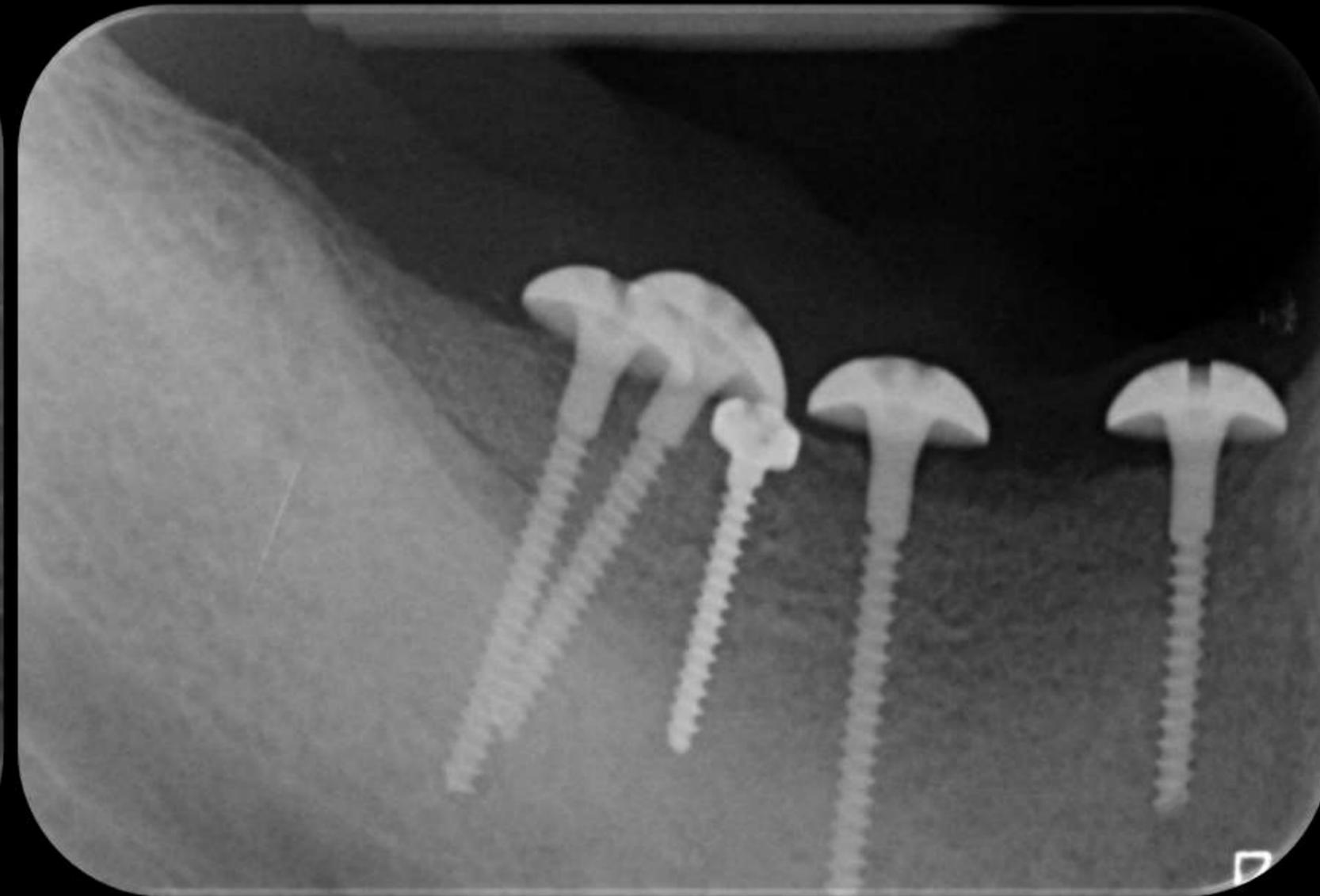
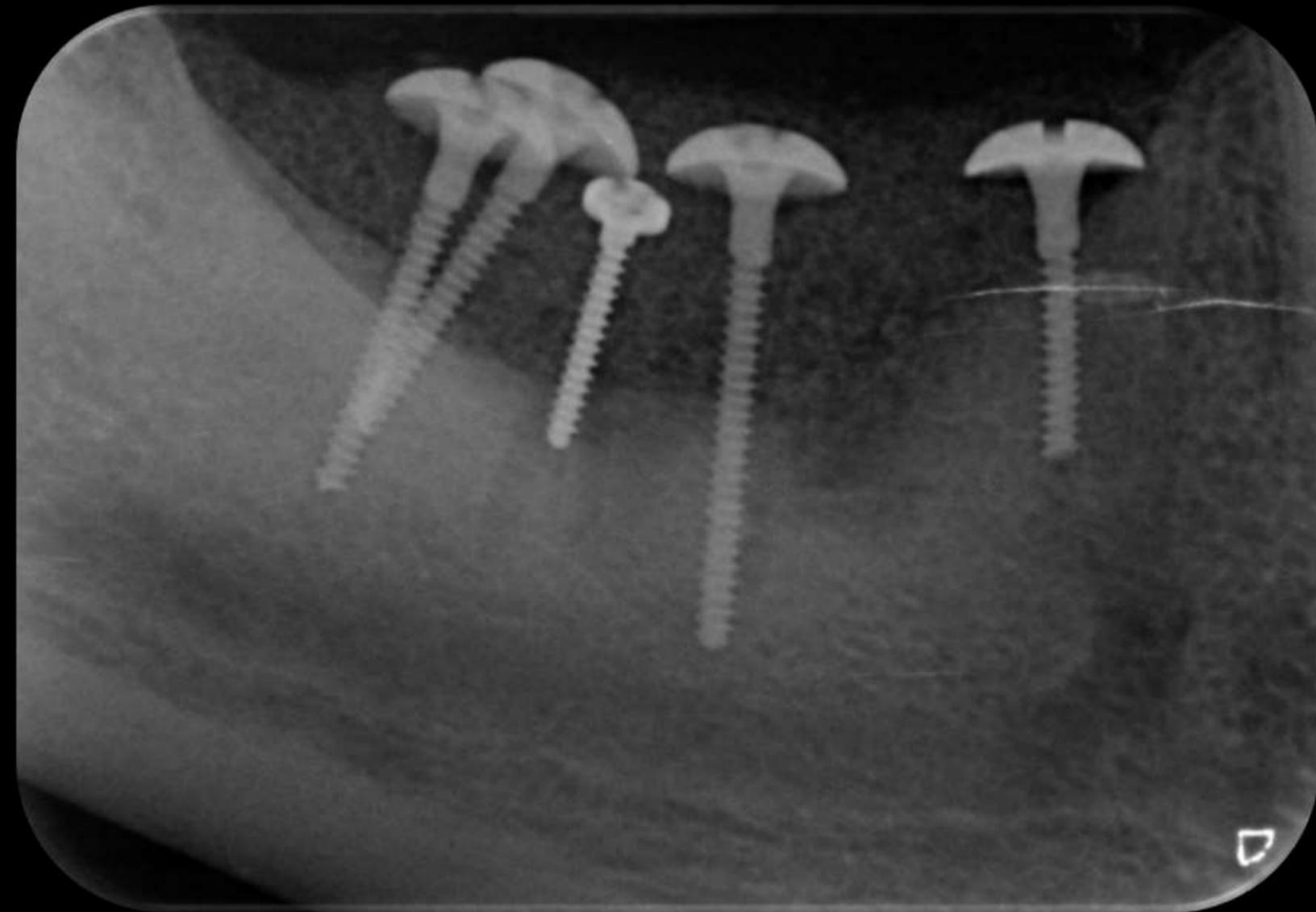
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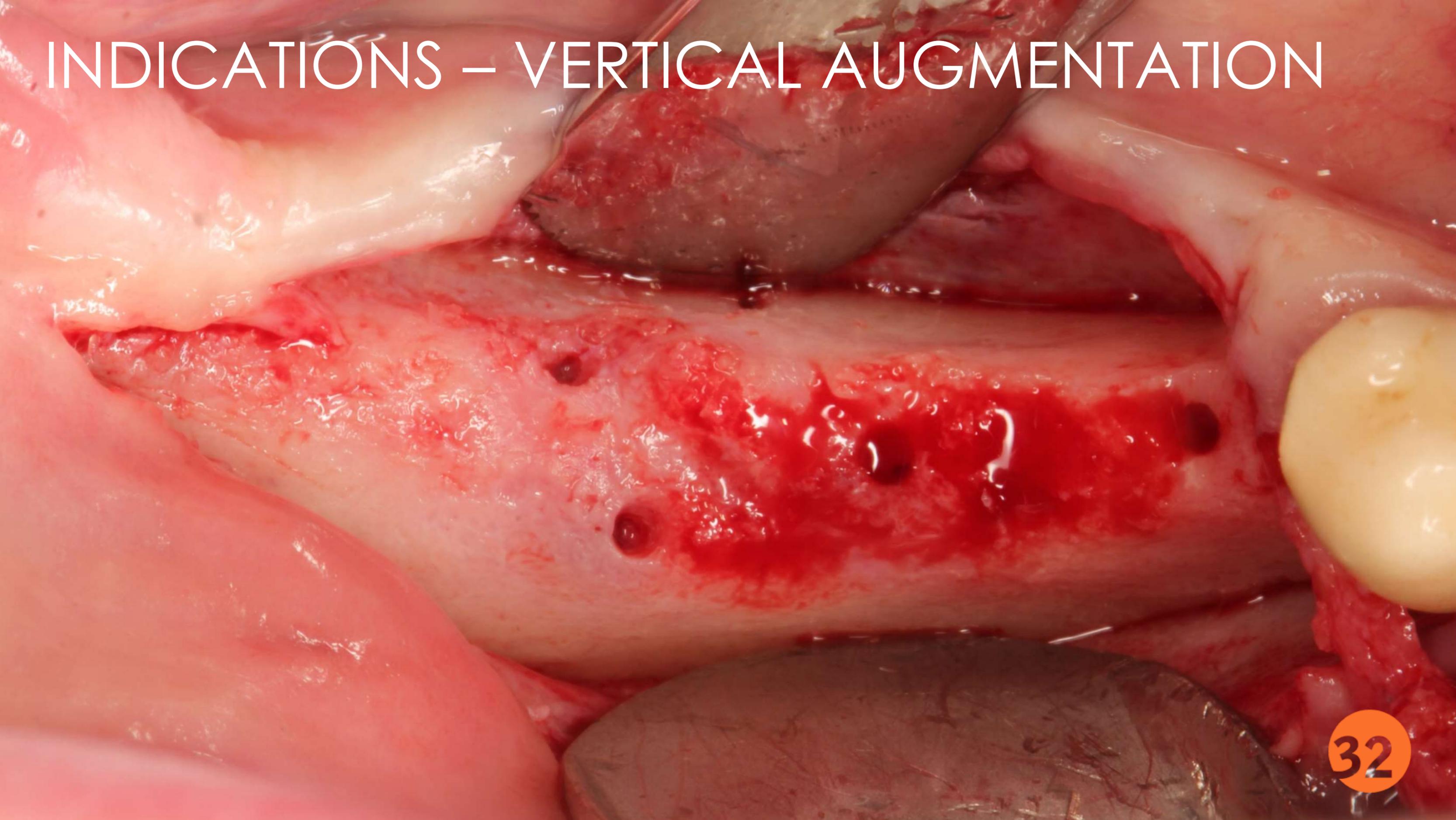
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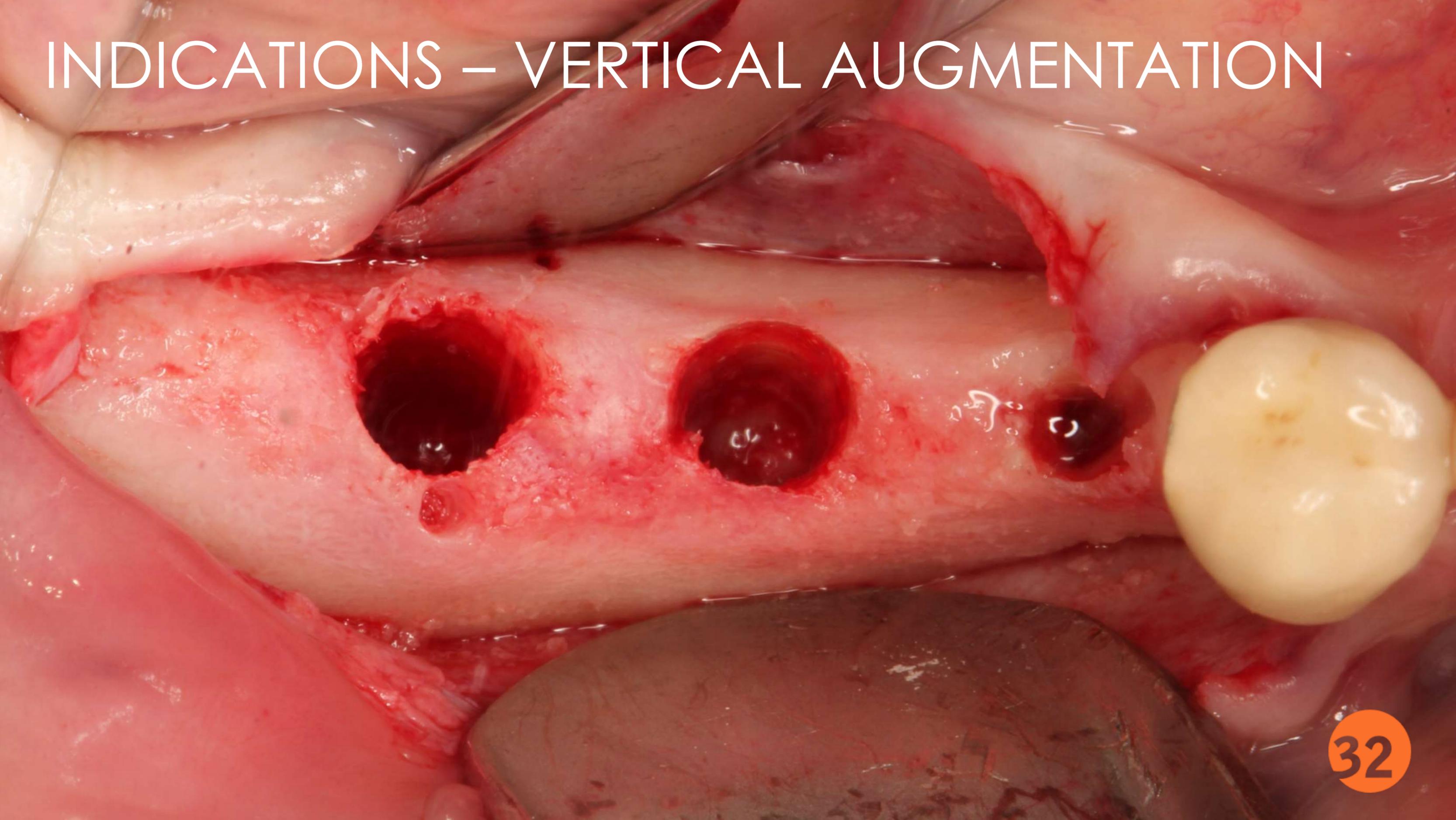
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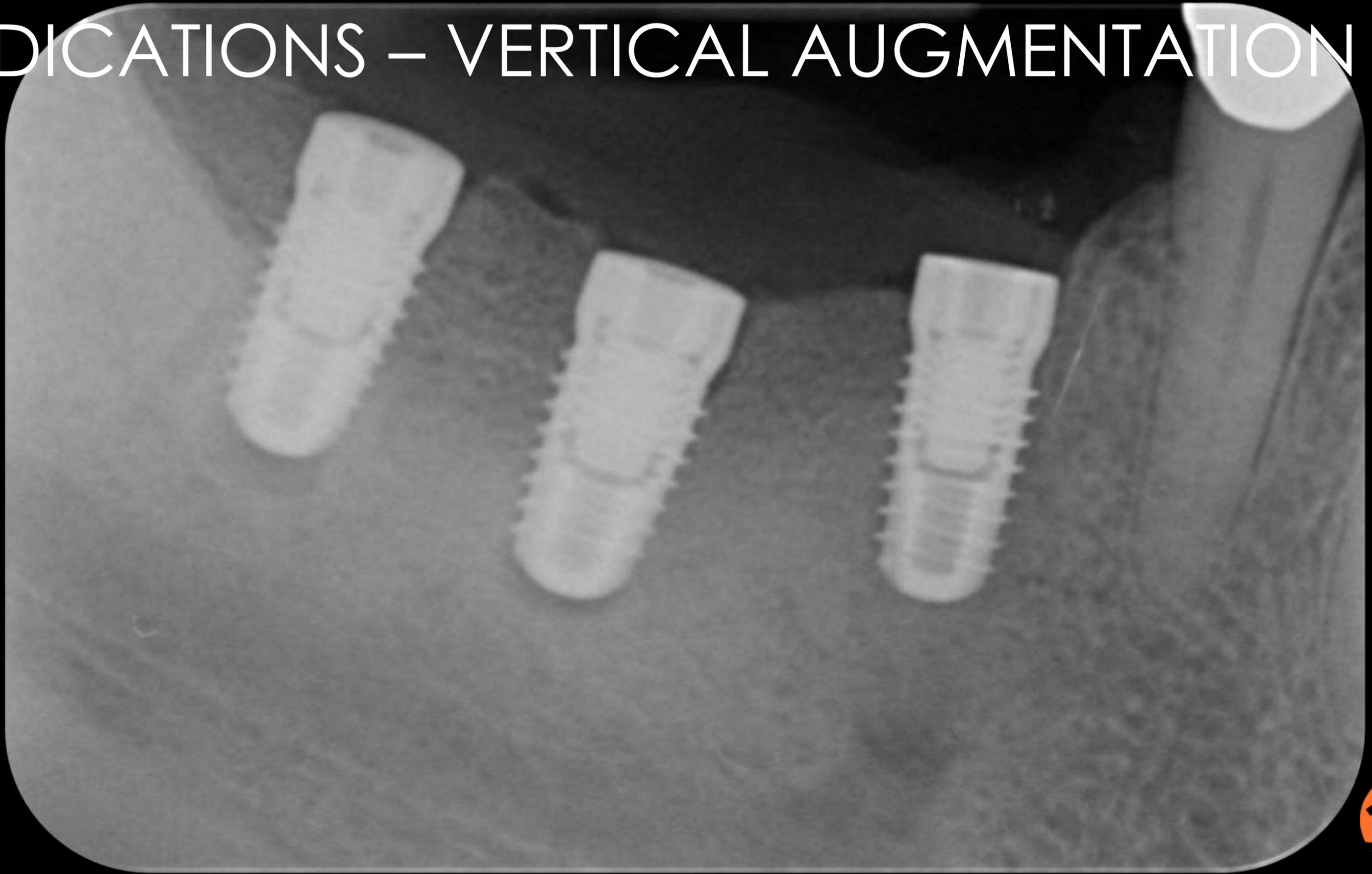
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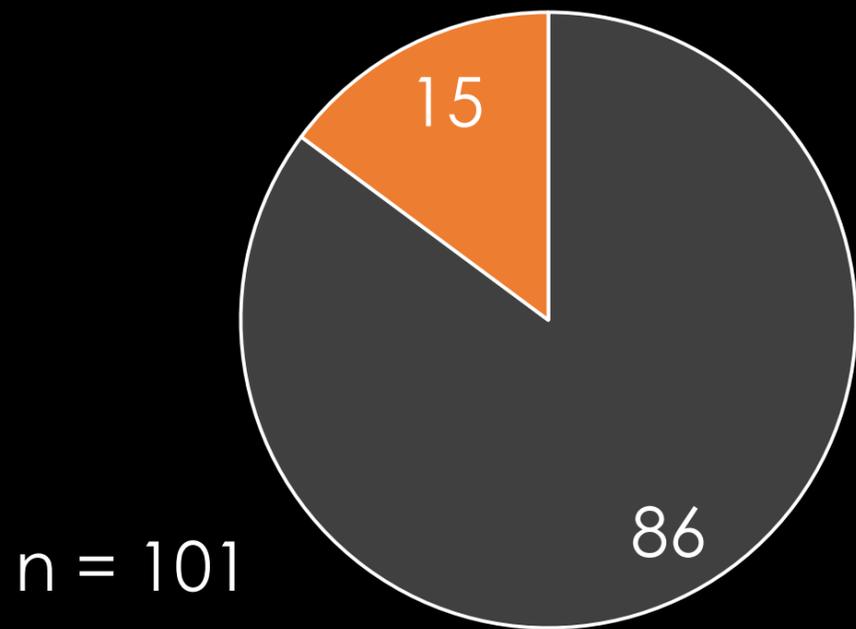
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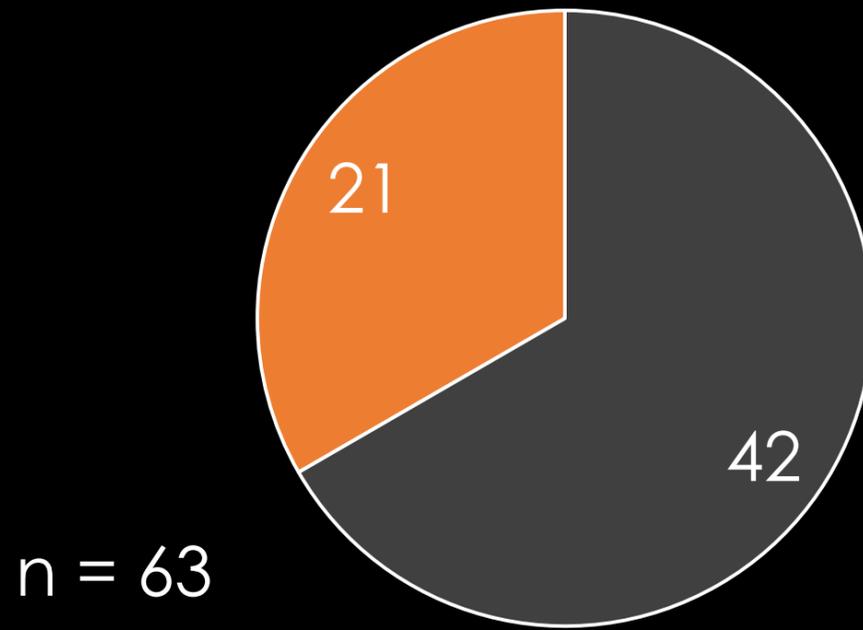
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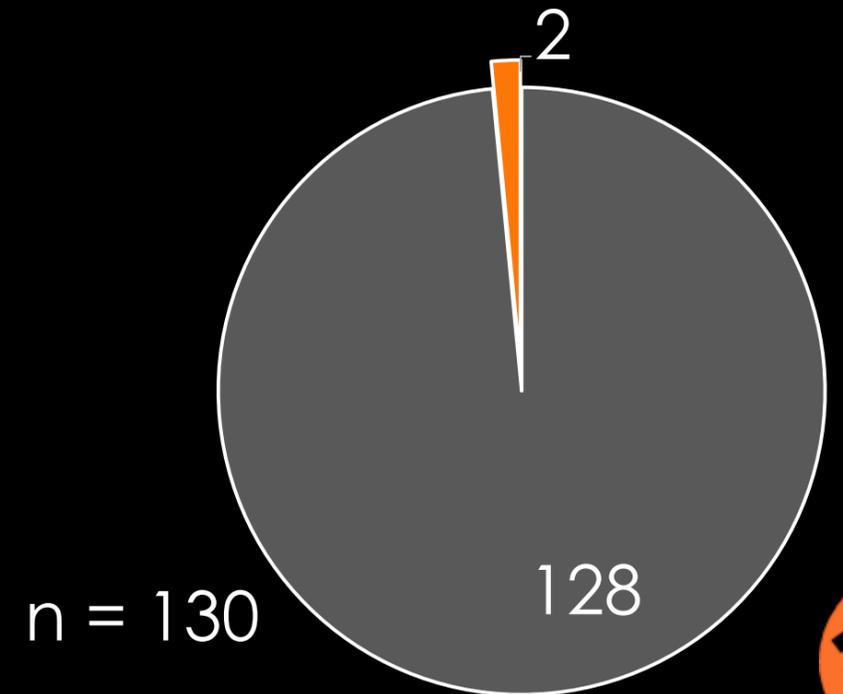
COMPLICATIONS



□ healthy ■ exposition



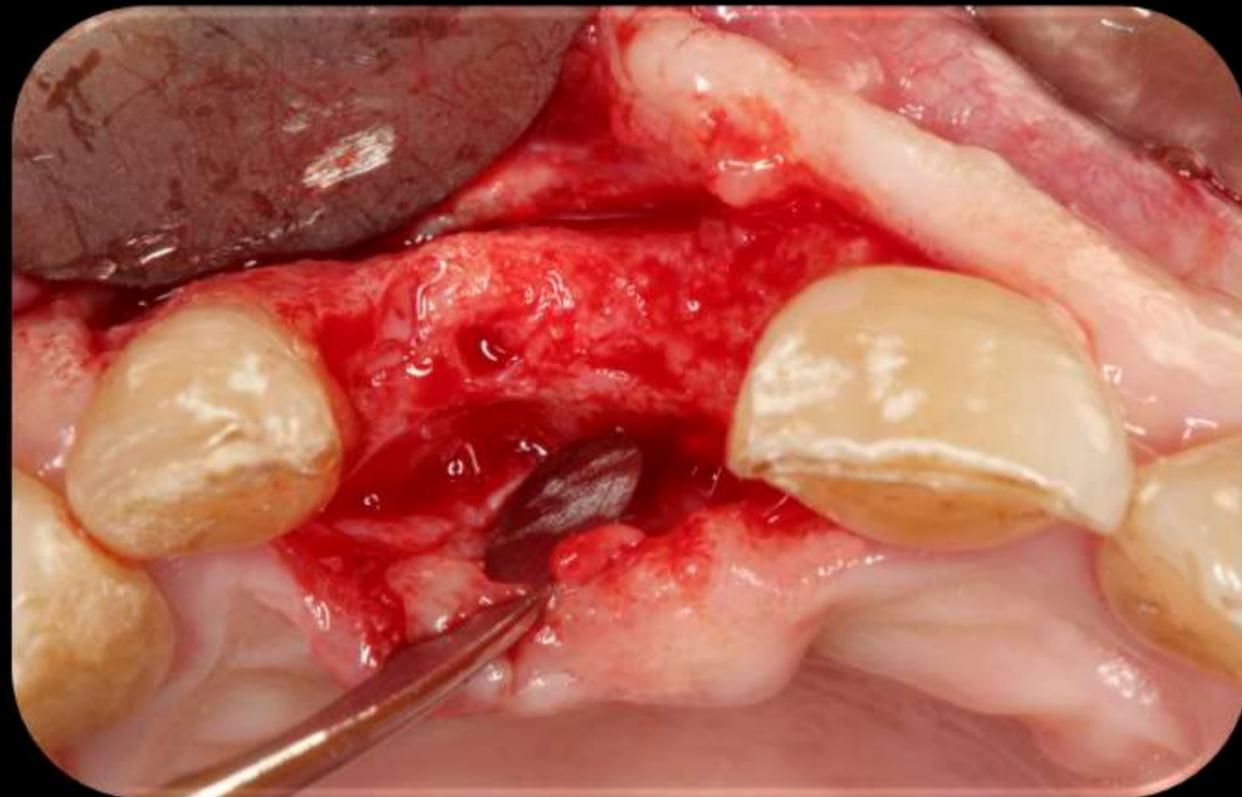
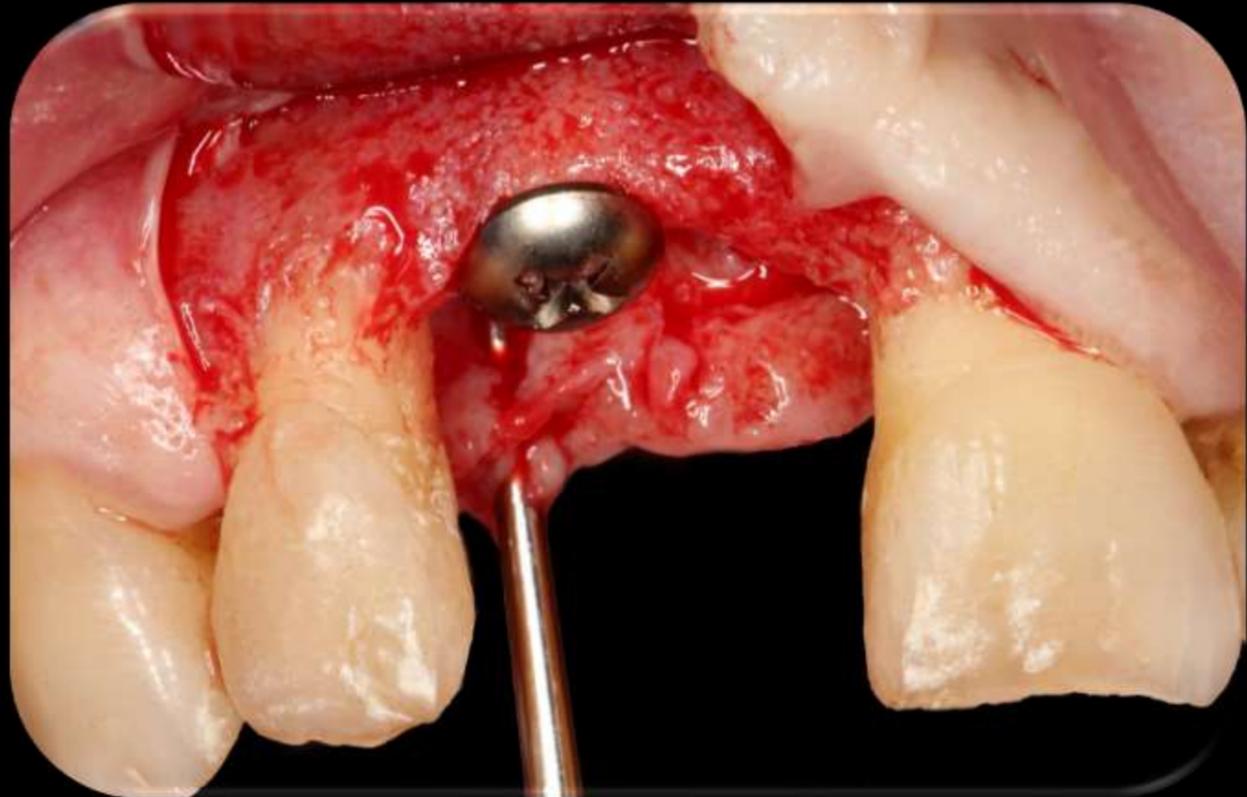
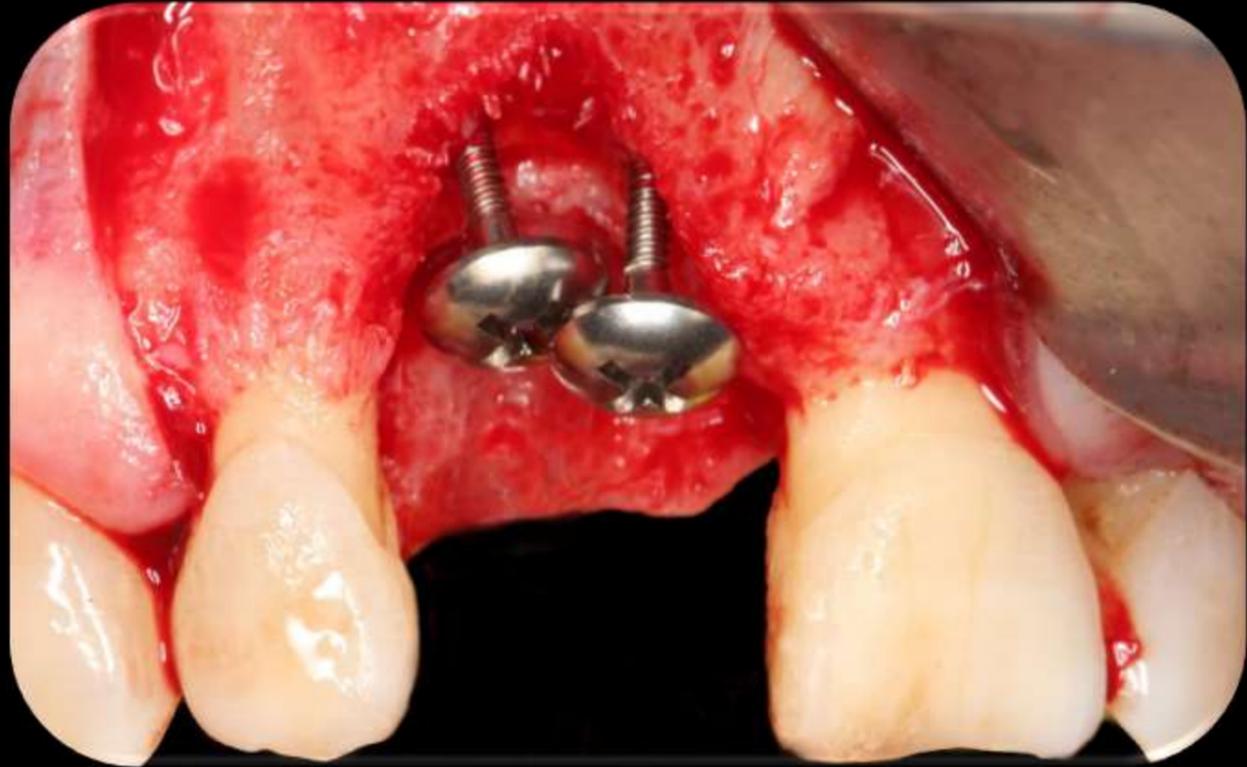
□ healthy ■ exposition



□ healthy ■ exposition

32

COMPLICATIONS



CONCLUSIONS

- Reduced surgery time and costs
- Reduced complication rate
- Easy surgery



THANK YOU
FOR YOUR
KIND ATTENTION!

MARKUS SCHLEE
PRIV-DOZ. DR. DR.

Specialist for periodontology (DGP, EDA)
and implantology (BDIZ)

Lecturer for DGI, APW,

Steinbeis-University Berlin,

Dresden International University

Lehr- und Forschungseinrichtung der Goethe Universität Frankfurt



schönezähne

zahnärzte für implantologie und parodontologie