

**GRANULOMATOSIS WITH
POLYANGIITIS:
VESTIBULOPLASTY WITH
STRIP FREE GINGIVAL GRAFT
&
XENOGENEIC COLLAGEN MATRIX**

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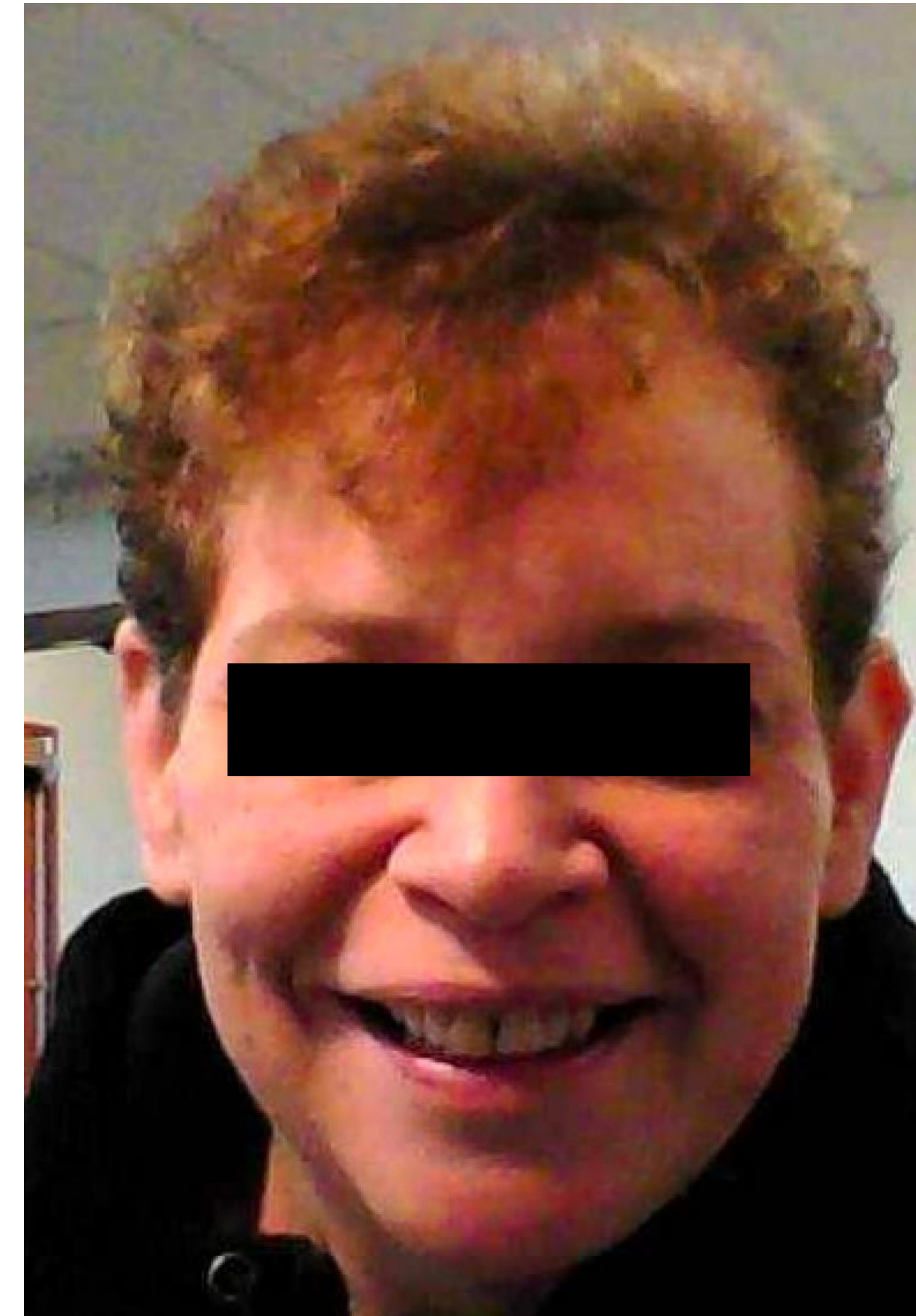
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INTRODUCTION

- GRANULOMATOSIS WITH POLYANGIITIS (GPA) IS A RARE NECROTIZING GRANULOMATOUS INFLAMMATORY DISEASE
- TYPICALLY INVOLVES THE UPPER AND LOWER RESPIRATORY TRACT AND NECROTIZING VASCULITIS AFFECTING SMALL TO MEDIUM VESSELS
- HEAD AND NECK INVOLVEMENT IN 90% OF CASES, SPECIFICALLY, ORAL MANIFESTATIONS IN 6-13% OF CASES
- ORAL MANIFESTATIONS CAN INCLUDE ORAL MUCOSAL ULCERATION, GINGIVAL ENLARGEMENT, ABNORMAL TOOTH MOBILITY, EXFOLIATION OF TEETH AND A DELAYED HEALING RESPONSE



Prior to 2020



April 2023



October 2023



CASE REPORT

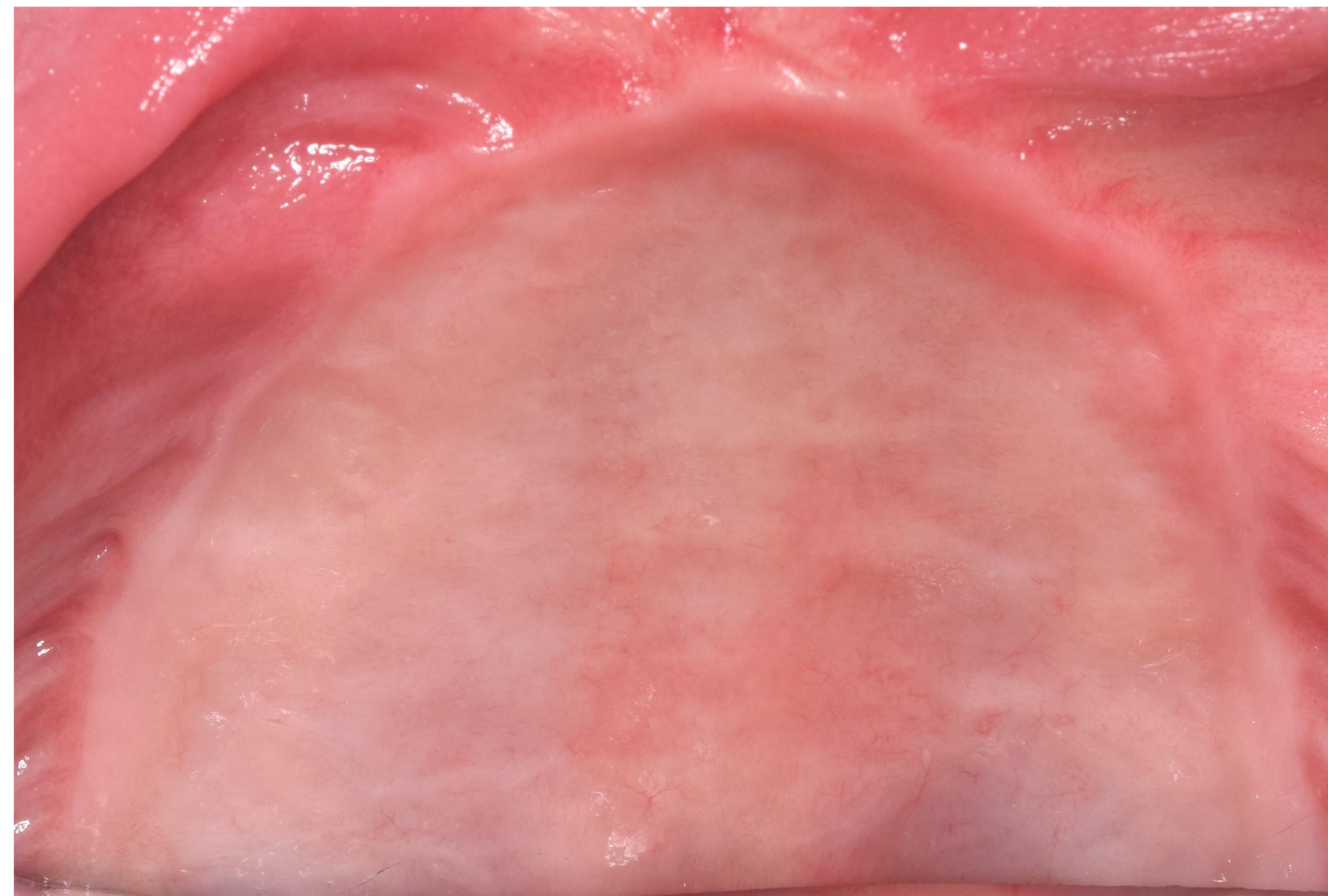
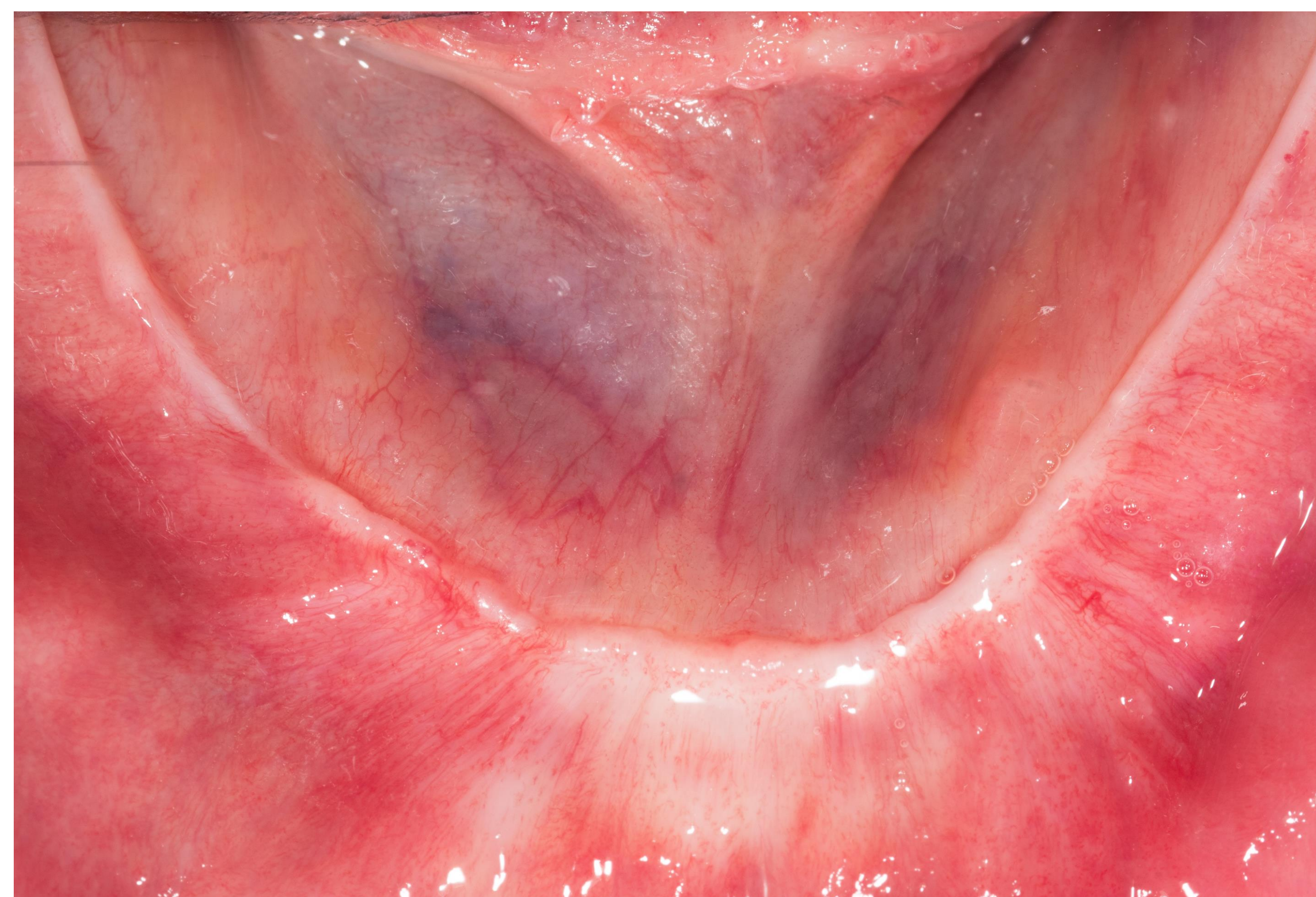
DEMOGRAPHICS

- 52 YEAR OLD, CAUCASIAN FEMALE
- **MEDICAL HISTORY:** CHRON'S DISEASE, ANAL CANCER, ANXIETY, DEPRESSION, GRANULOMATOSIS POLYANGIITIS (WEGNER'S GRANULOMATOSIS)
- **MEDICATIONS:** PREDNISONE , AZATHIOPRINE, CLONAZEPAM, DIAZEPAM, DULOXETINE, ESCITALOPRAM, FENTANYL PATCH
- **SOCIAL HABITS:** CIGARETTE SMOKING (4-5 CIGS/DAY FOR 30 YEARS), PAST HISTORY OF COCAINE USE (QUIT 2002)

HISTORY

- **2021**
 - SIGNS & SYMPTOMS: **STRAWBERRY-LIKE APPEARANCE** OF GINGIVA, ENLARGED, ERYTHEMATOUS, PAINFUL CONTAINED RED TO PURPLE PETECHIAE AND HAVE A GRANULAR APPEARANCE, MOBILE TEETH
 - PATHOLOGY RESULTS: GRANULOMATOSIS POLYANGIITIS
- **2022**
 - EDENTULATION IN MARCH 2022
- **2023**
 - PATIENT'S CHIEF COMPLAINT: "MY DENTIST STARTED MAKING ME DENTURES BUT THEN TOLD ME MY CASE IS TOO COMPLEX"
 - SEVERELY ATROPHIED RIDGES AND LACK OF VESTIBULE AND KERATINIZED TISSUE

INITIAL PRESENTATION

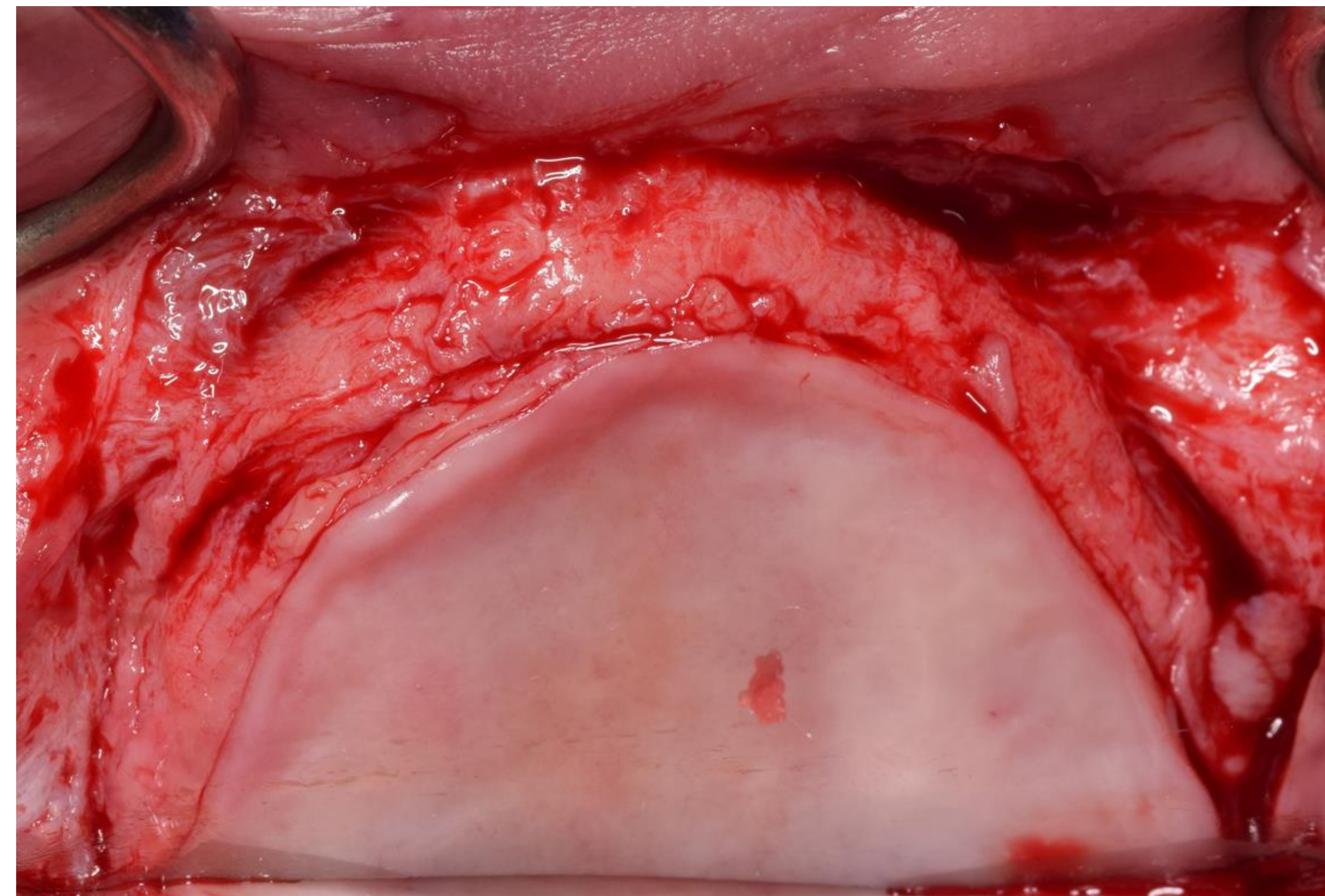
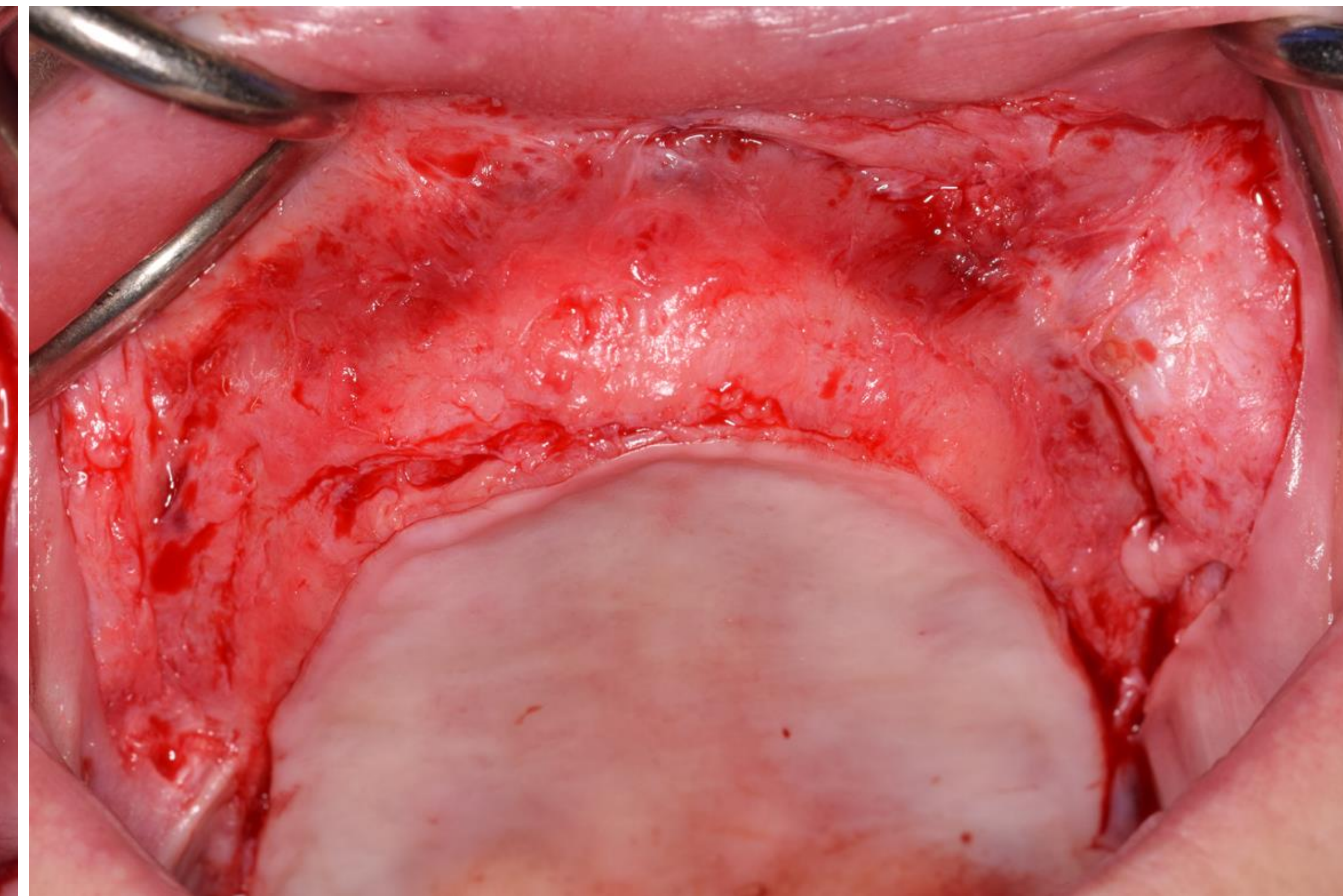
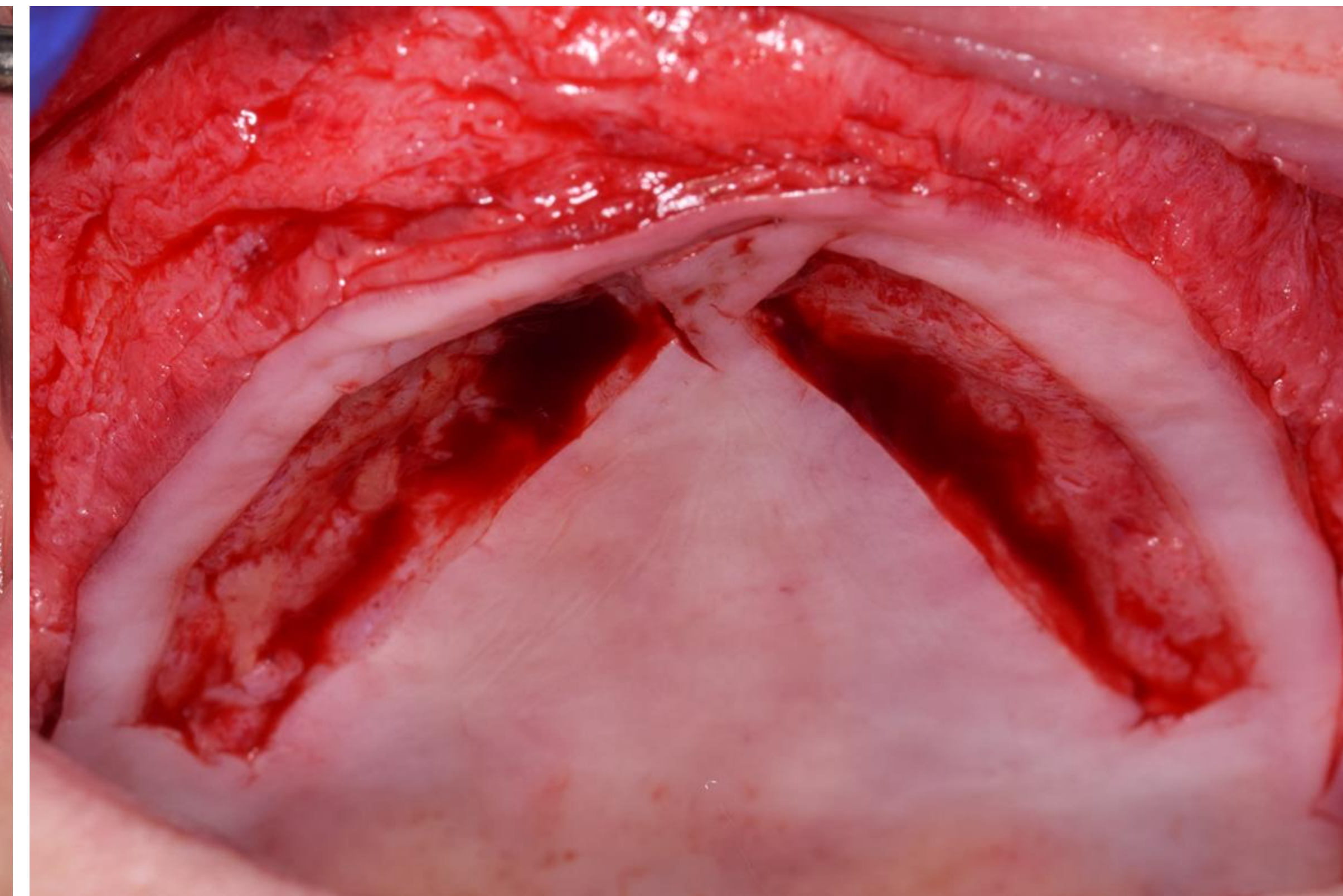
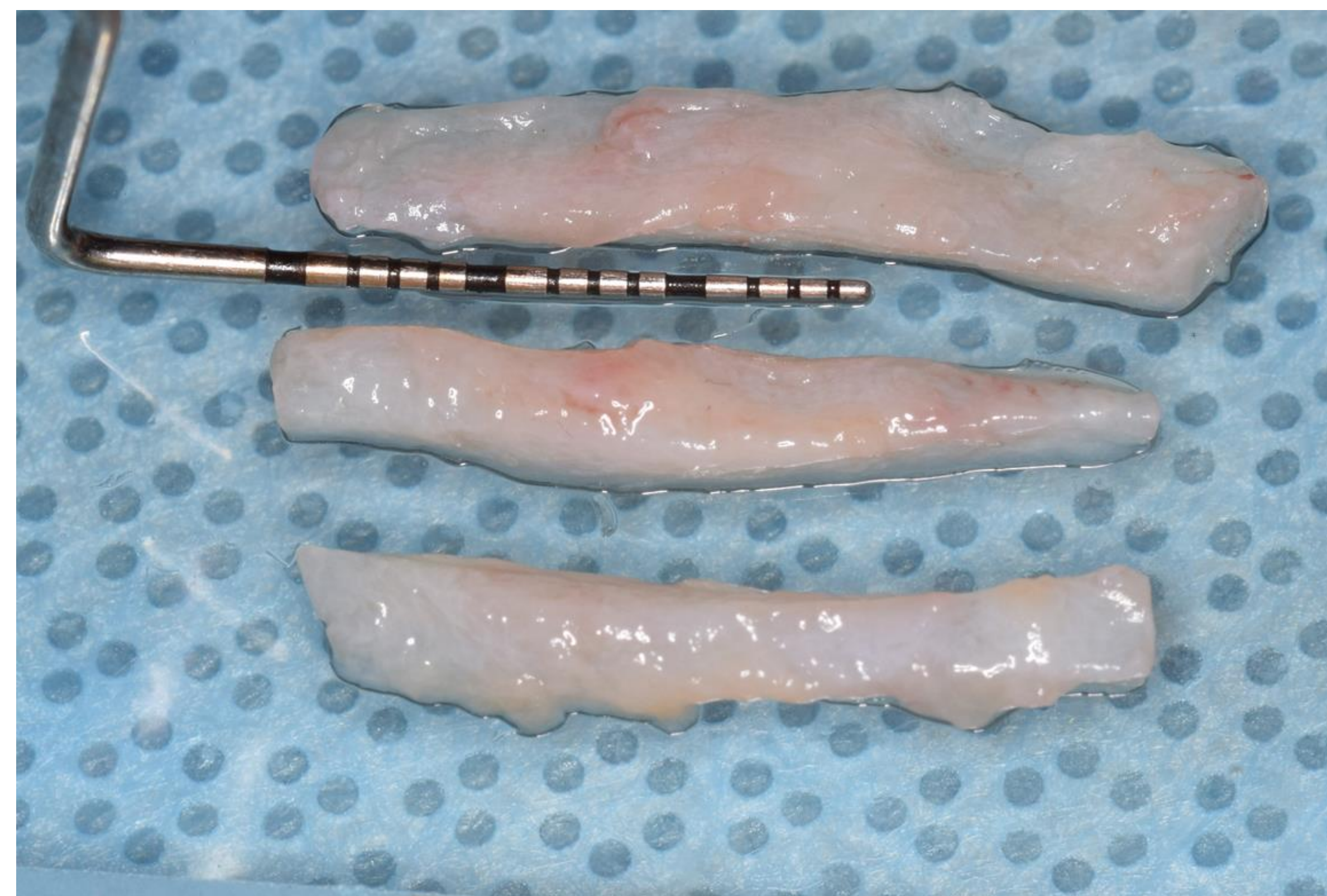
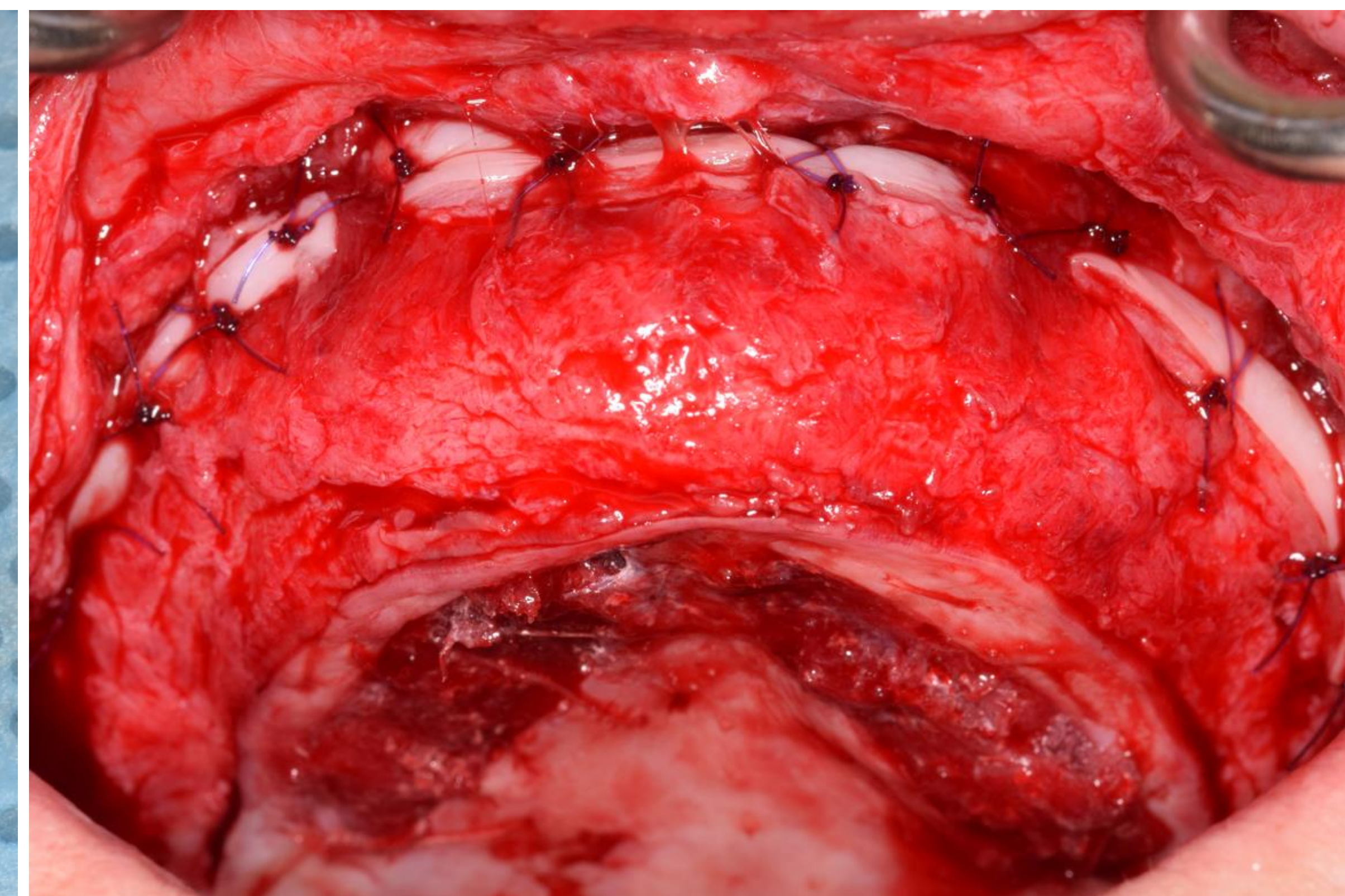
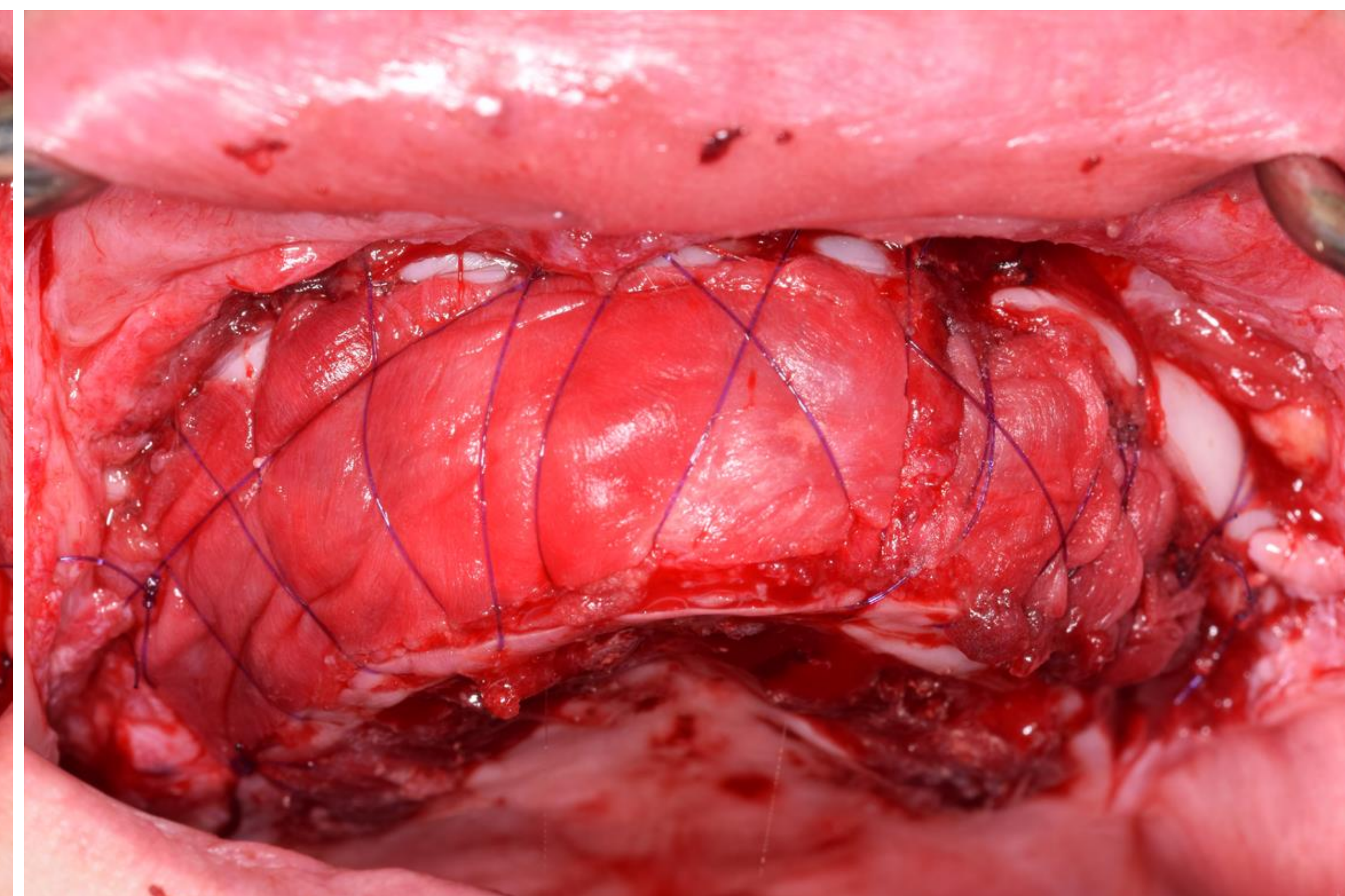


TREATMENT

MAXILLARY SURGERY

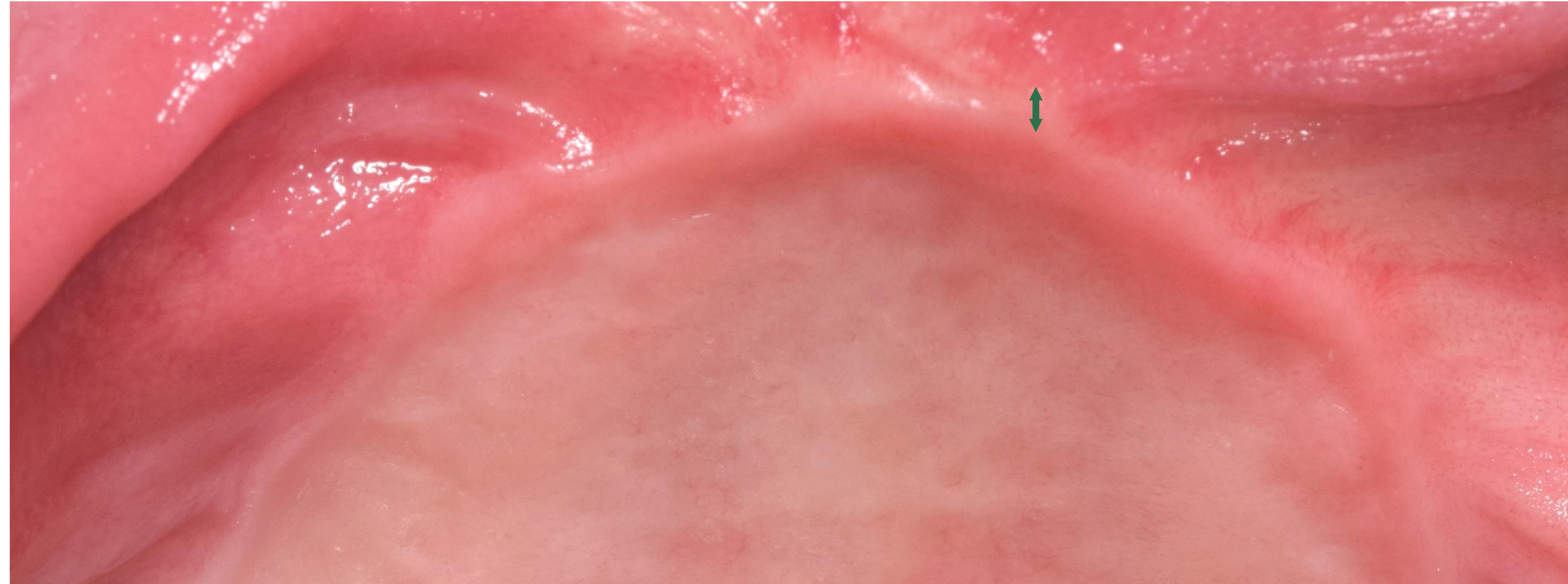
PRE-IMPLANT TREATMENT PLAN

- PRE-IMPLANT PROCEDURES FOR SOFT TISSUE PHENOTYPE MODIFICATION INCLUDING VESTIBULOPLASTY + MUCOGINGIVAL SURGERY TO ADDRESS LACK OF KERATINIZED TISSUE
- TREATMENT WITH A **STRIP FGG + XENOGENEIC COLLAGEN MEMBRANE (MUCORGRAFT® GEISTLICH®)**
- MAXILLA WAS TREATED FIRST, AND THE MANDIBLE WAS TO BE TREATED 6 MONTHS LATER

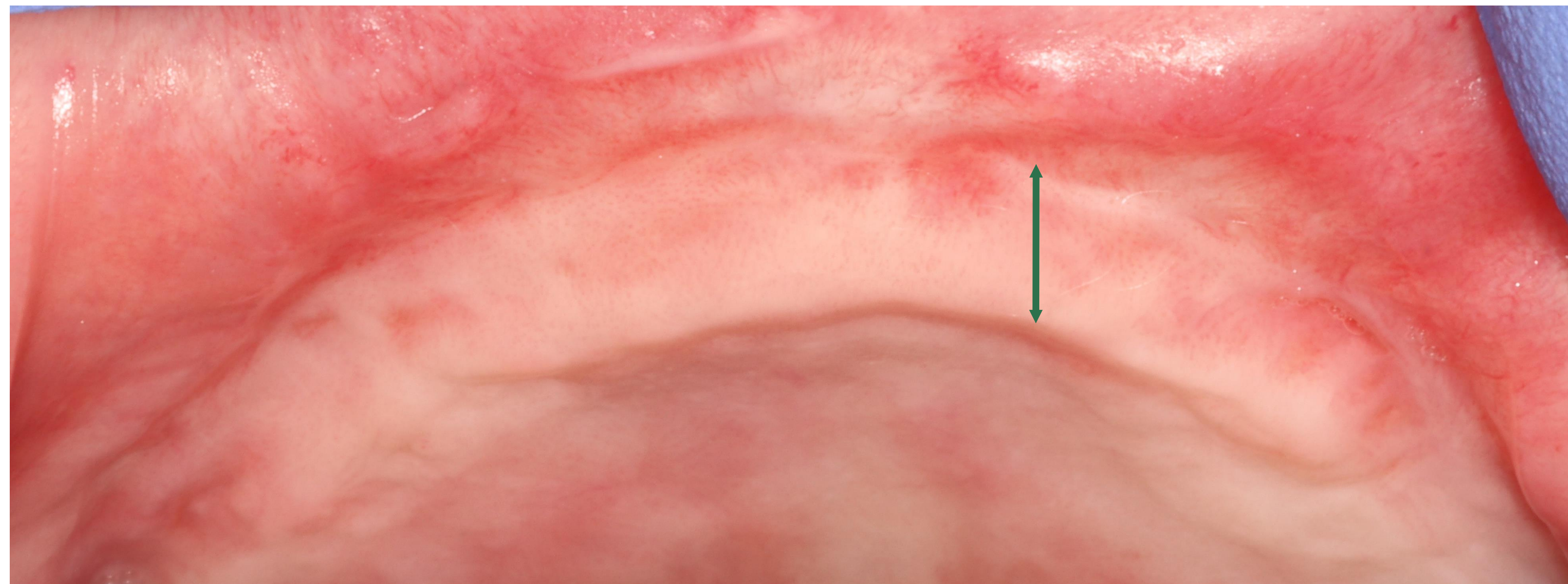


RESULTS

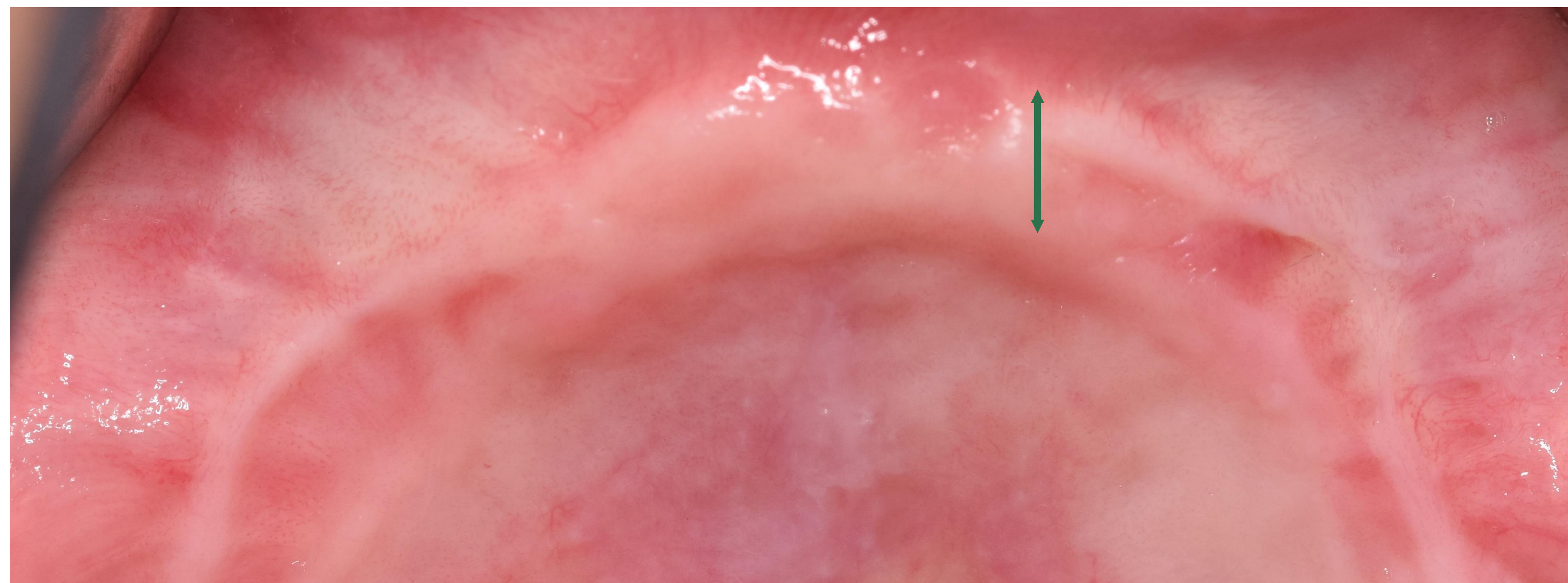
INITIAL



6.5 WEEKS



10 MONTHS



CONCLUSION

- AT A 10-MONTH POST-OPERATIVE FOLLOW-UP OF THE MAXILLA, THE PATIENT DEMONSTRATED AN INCREASE IN KERATINIZED TISSUE WIDTH AND THICKNESS
- SIGNIFICANT INCREASE IN VESTIBULE SEEN AT 6.5 WEEKS WITH SOME VESTIBULAR DEPTH RELAPSE AT 10-MONTHS (POTENTIALLY DUE TO NOT WEARING INTERIM DENTURES)
- A **SUITABLE TREATMENT OPTION** FOR LACK OF VESTIBULE AND KERATINIZED TISSUE IN A PATIENT SUFFERING FROM **GPA** IS THE USE OF A **STRIP FREE GINGIVAL GRAFT IN COMBINATION WITH A XENOGENEIC COLLAGEN MATRIX**

REFERENCES

1. Labrador, Alberto J Peraza et al. "Oral granulomatosis with polyangiitis a systematic review." *Clinical and experimental dental research* vol. 9,1 (2023): 100-111. doi:10.1002/cre2.706
2. Urban, I. A., Tavelli, L., Barootchi, S., Wang, H.-L., & Barath, Z. (2020). Labial Strip Gingival Graft for the Reconstruction of Severely Distorted Mucogingival Defects: A Prospective Case Series. *The International Journal of Periodontics & Restorative Dentistry*, 40(6), 845–852. <https://doi.org/10.11607/prd.4912>
3. Jiang, X., & Lin, Y. (2019). Gain of keratinized mucosa around implants in the posterior mandible by a modified apically positioned flap and xenogeneic collagen matrix. *The International Journal of Periodontics & Restorative Dentistry*, 39(5), 721–727. <https://doi.org/10.11607/prd.4176>
4. (2021) *Instructional case, a strip gingival Autograft and Geistlich Mucograft®* by Prof.Dr. Istvan Urban. Available at: <https://www.youtube.com/watch?v=B3fluPeuM88>