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SCIP flap

Case series

MUNI
MED

- M 28y
- BMI 25
- injury of both hands by a hydraulic pressing system

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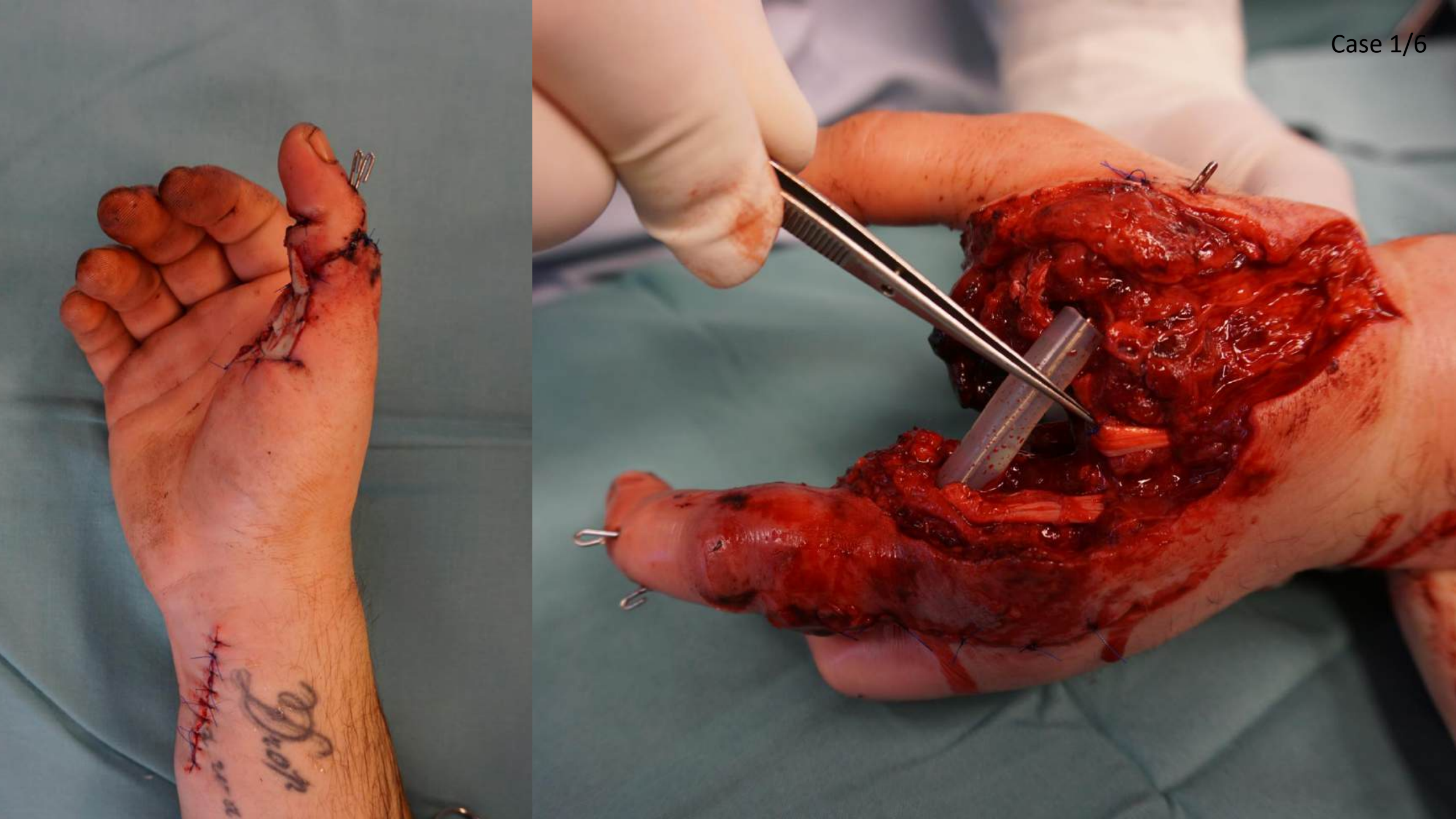


14x7

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Case 1/6

- F 29y, DM I.type
- Marjoline tumor in a burn scar terrain
- BMI 21

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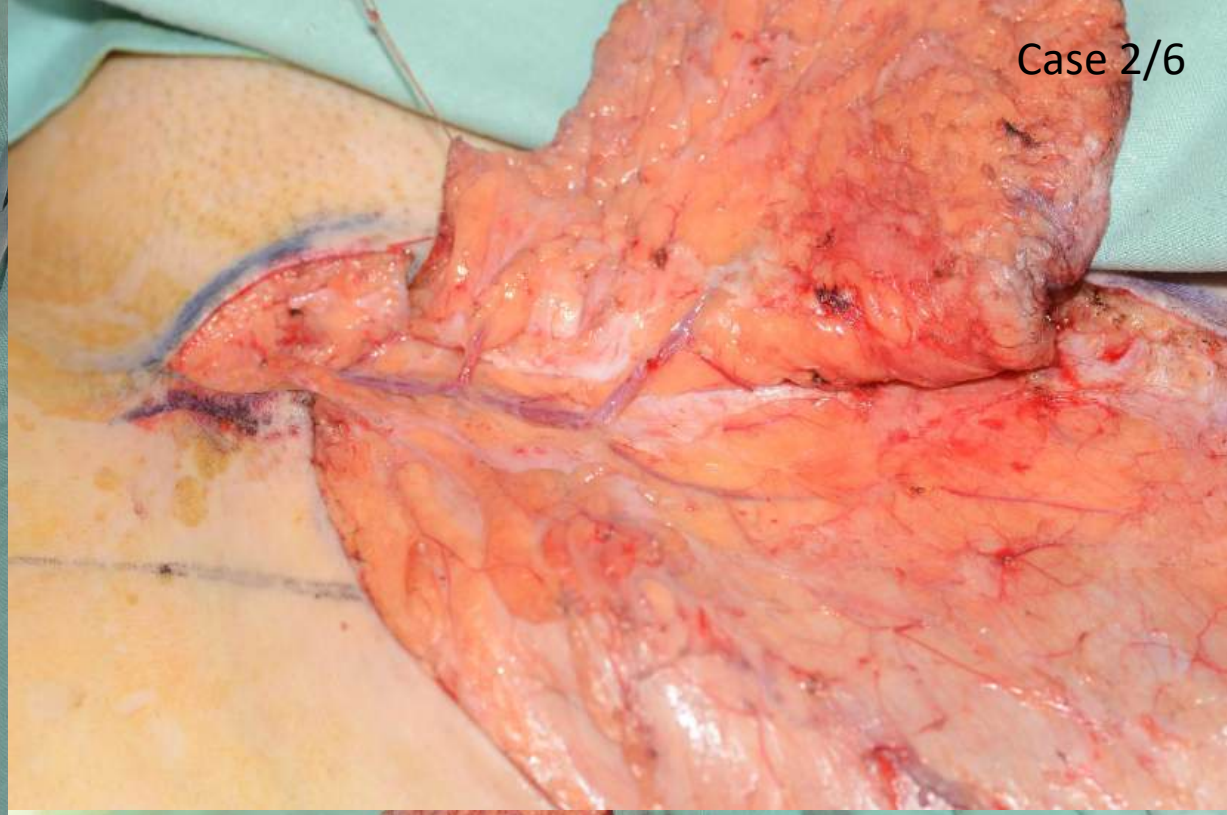
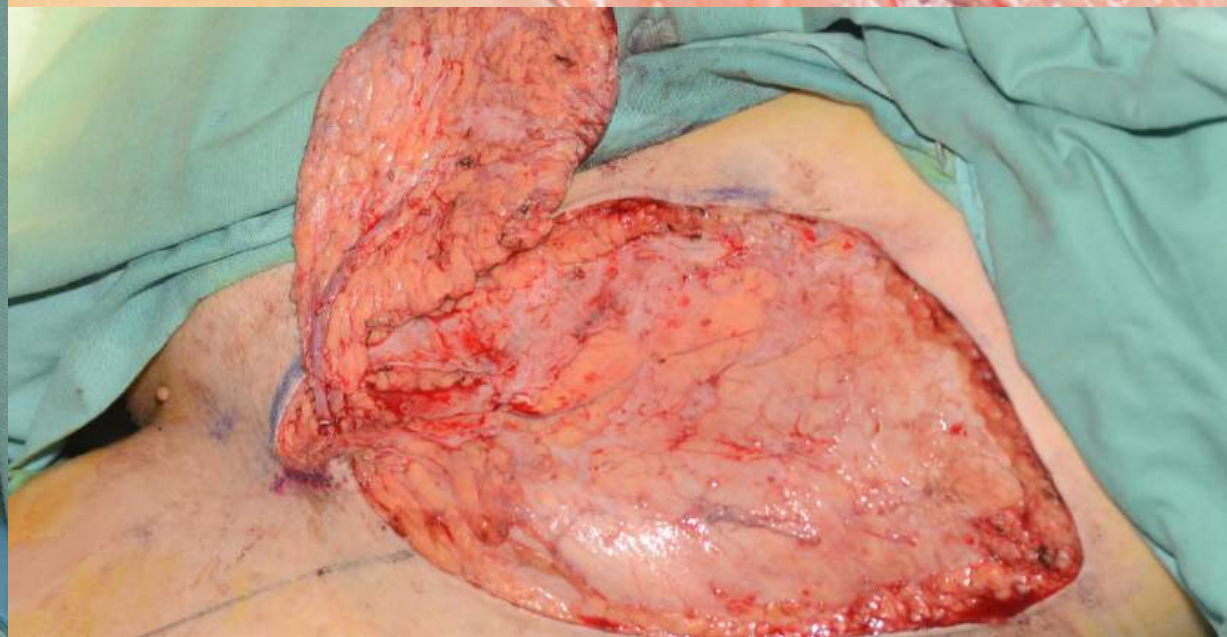
20×17





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- F 65y, BMI 37
- sarcoma of her left tibia 3/2019

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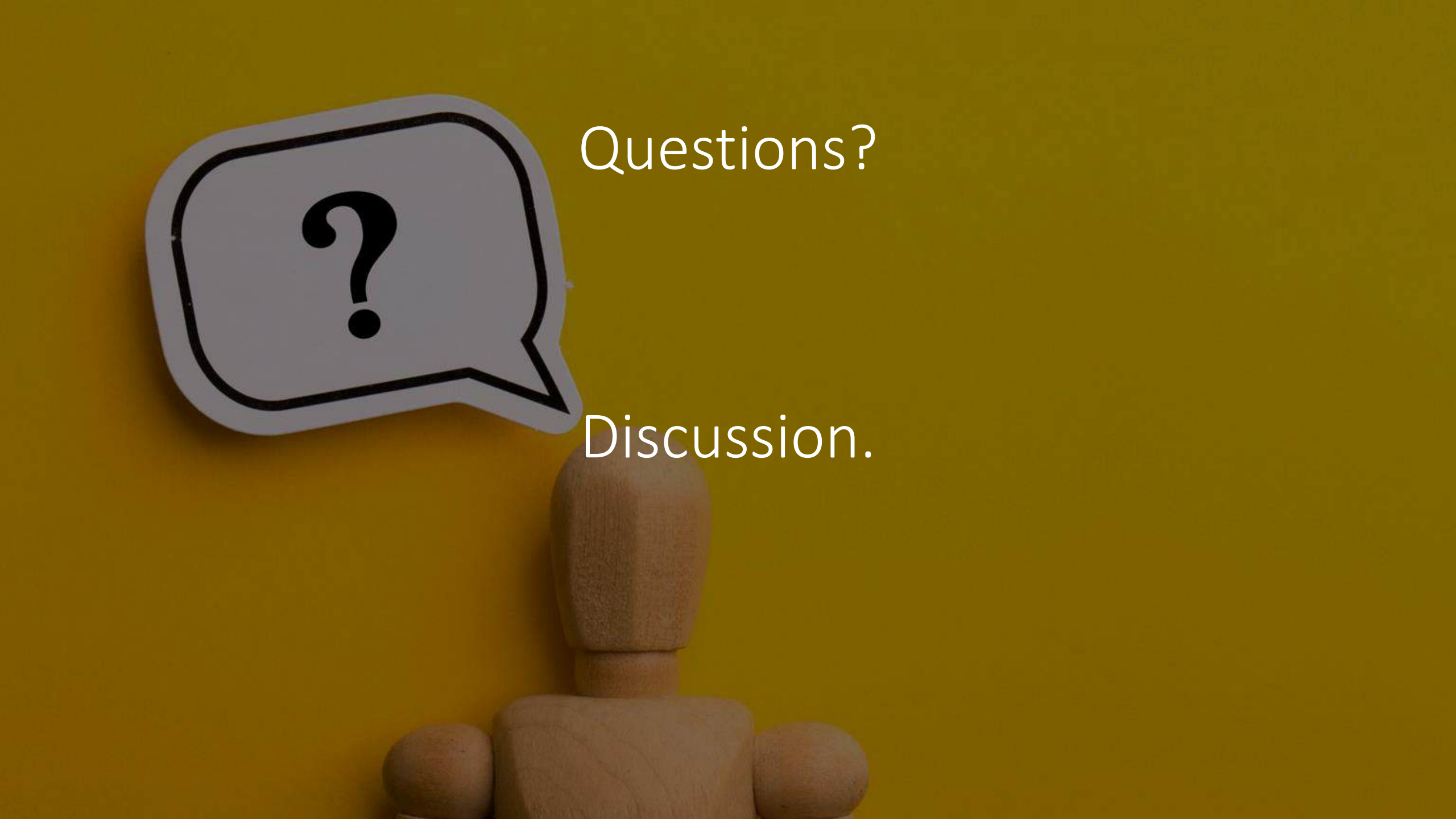
Questions?
Discussion.

- M 38y
- BMI 28
- COVID-19+


Case 4/6

- M 60y
- DFS of forehead
- 3x excised with positive margine in different hospital

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… after 2nd excision

Case 5/6

Microsurgical Forehead Reconstruction

Denis Ehrl, MD, P. Niclas Broer, MD, PhD, Paul I. Heidekrueger, MD, and Milomir Ninkovic, MD, PhD

Abstract: Reconstruction of the forehead remains challenging. Especially in cases of large or even complete forehead defects, local flaps and skin grafting may not be an option, necessitating free flap coverage. The aim of this retrospective case series was to develop an algorithmic surgical approach as well as to evaluate surgical and aesthetic outcomes of microvascular-based forehead reconstructions, using gracilis muscle or anterolateral thigh flaps in 15 cases. The mean size of the defects was 84.6 (range: 25–160, ±44.1) cm^2, all with significant area of bone exposure. The free flap reconstructions included 7 gracilis muscle flaps, covered with 1.2-mm-thick unmeshed split-thickness skin grafts, and 8 anterolateral thigh flaps with a mean size of the free flaps of 160 (range: 56–300, ±78.6) cm^2. In all patients, wound healing at the donor site was uneventful. Minor complications occurred in 3 patients and required small revision procedures. This case series demonstrates that microsurgical reconstruction of multiple entities of forehead defects poses a reliable method, especially in large and complex defects. In our opinion, given low risks for major complications and superior aesthetic results, the gracilis muscle flap covered with unmeshed split-thickness skin graft is ideally suited to reconstruct the forehead and should be one of first choices.

Key Words: Anterolateral thigh flap, forehead, gracilis muscle flap, reconstruction

(*J Craniofac Surg* 2017;28: 212–217)

The forehead is an aesthetically highly visible and thus important part of the face. Meanwhile, its relatively inelastic tissues and convex skull shape result in challenging problems when reconstruction of forehead defects becomes necessary. Such defects may result from a variety of conditions, including benign and malignant cutaneous tumors, trauma, burns, radiation, congenital lesions, or infection.[1–3] The extent of tissue loss can range from small partial-thickness to large full-thickness wounds involving bone and potentially also dura. To achieve optimal functional and aesthetic results, the reconstruction requires maintenance of brow position, preservation of a symmetric frontal and temporal hairline, as well as concealment of scars within the relaxed skin tension and hairlines.[2–7] Especially when faced with large or even complete forehead defects, local flaps and skin grafting may not be an option, ultimately requiring free flap coverage. Even though several surgical options for forehead reconstruction, including different free flaps, have been published in the literature, no ideal approach has yet been found.[1–24] Of the aforementioned reports regarding free flap-based forehead reconstruction, only a paucity describe the long-term aesthetic and functional outcomes of both recipient and donor site.[24]

Hence, the purpose of this retrospective case series was to evaluate the authors' to define an algorithmic approach and to analyze surgical as well as aesthetic outcomes of microvascular-based forehead reconstructions to suggest the best option according to the anatomic, functional, and aesthetic requirements. In this context and contrary to our initial intuition, we found the free gracilis myocutaneous flap to be of tremendous value.

PATIENTS AND METHODS

Approval for the study was granted by the regional medical ethics committee. Over a 10-year period (2006–2016), 14 consecutive patients underwent 15 free flap reconstructions for partial and complete forehead defects at the Department of Plastic, Reconstructive, Hand and Burn Surgery, Bogenhausen Academic Teaching Hospital, Germany. A chart review was performed to obtain the following data: age, sex, underlying disease/mechanism of injury, location and size of the defect, type and size of flap used, length of hospitalization, and encountered complications (Table 1). Complications were divided into major and minor. Total flap loss and wound-healing complications at the donor site were declared as major complications. All others complications, including infections, small wound-healing disorders at the site of flap inset, and perfusion problems of the free flap with loss of <10% of tissue (tip necrosis), were declared as minor complications. In addition, aesthetic results were evaluated.

The operative techniques of the gracilis muscle flap[13] and the anterolateral thigh (ALT) flap[18] have previously been described in detail. After careful dissection the flap is transferred to the defect and microvascular anastomosis is performed, usually with the superficial temporal vessels as the recipient vessels.

In case of gracilis muscle flap, for ideal inset and to achieve maximum surface area, the muscle can be spread to become a thin muscular sheet by careful dissection of the epimysium. This portion of the operation should be performed under high loupe magnification or under the microscope. In doing so, the intrinsic vessels running between muscle fibers can be protected to guarantee sufficient perfusion of the muscle fibers. All other connective tissue has to be cut to gain appropriate expansion. Using this technique, the muscle can be enlarged to 3 to 4 times of its original size, which is usually enough to cover an entire forehead if necessary.[24] The gracilis muscle

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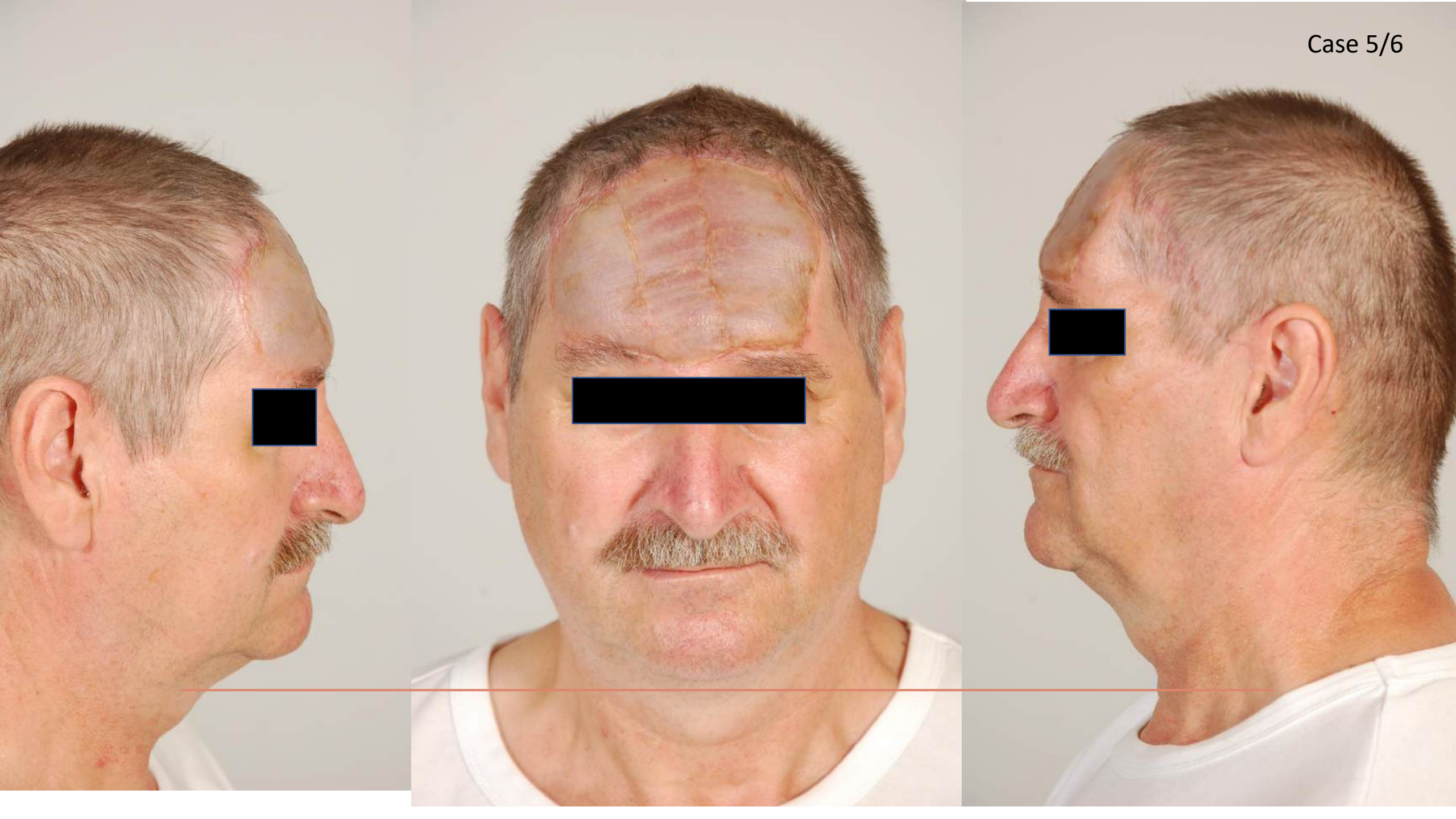
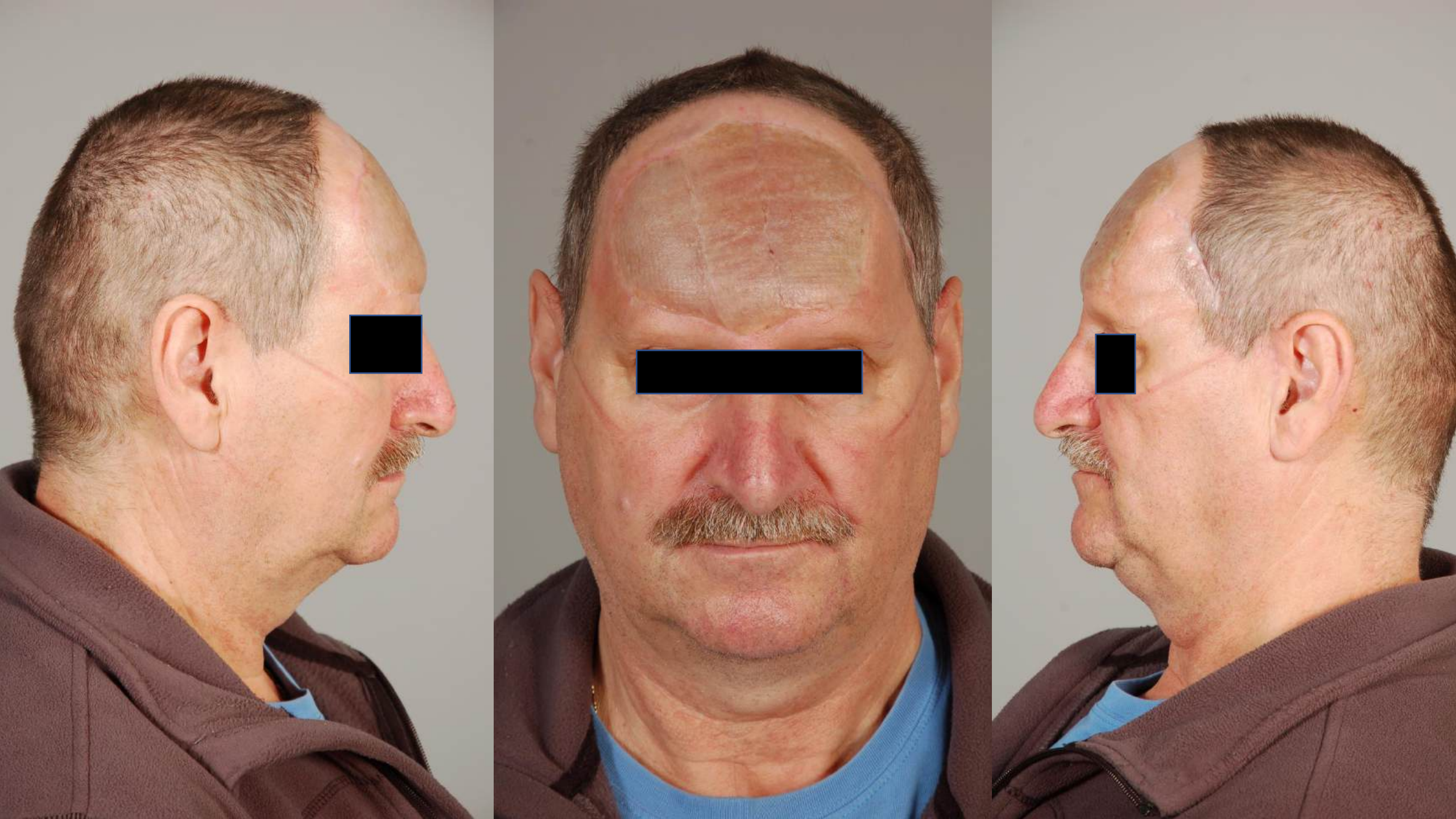
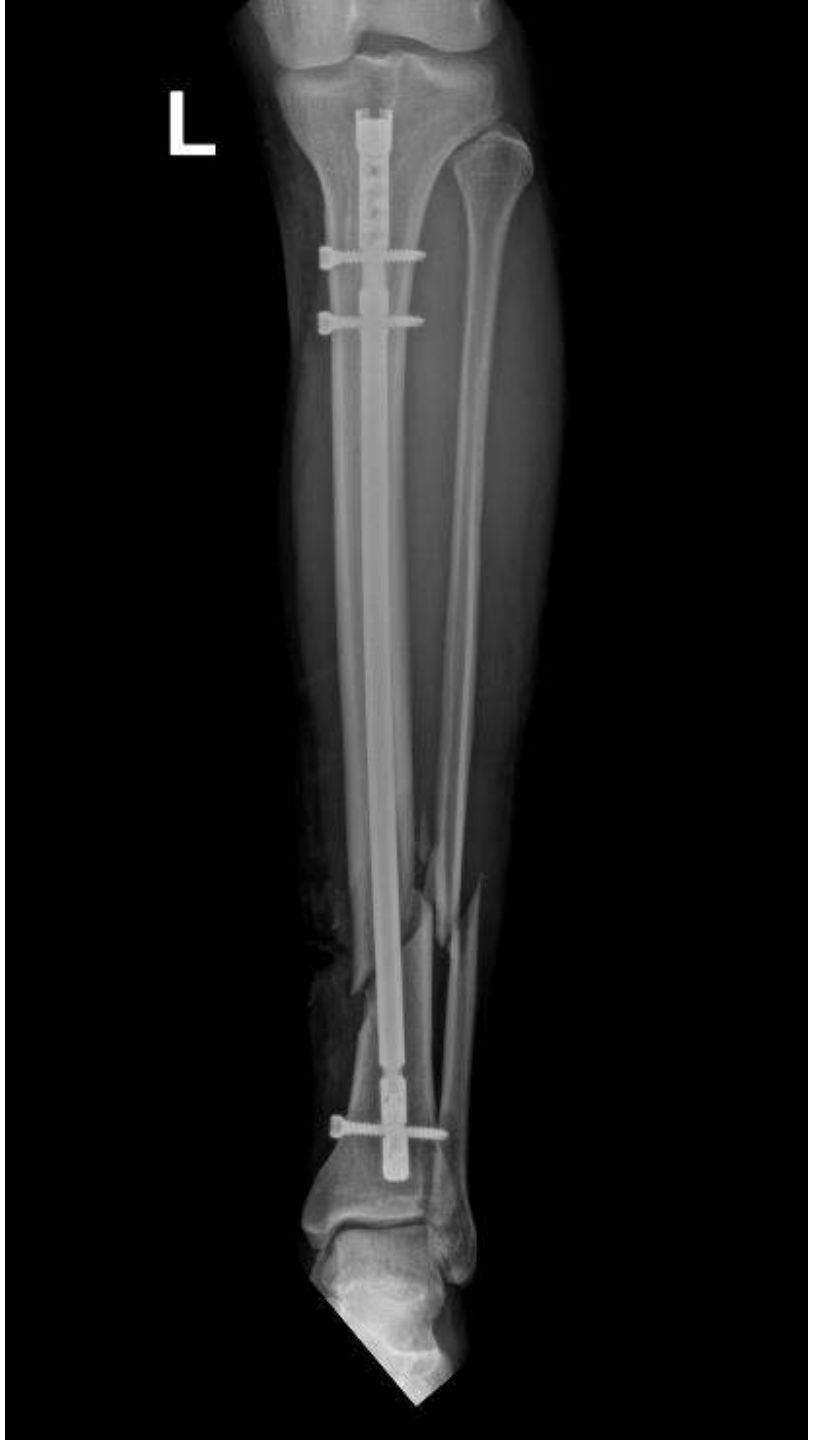
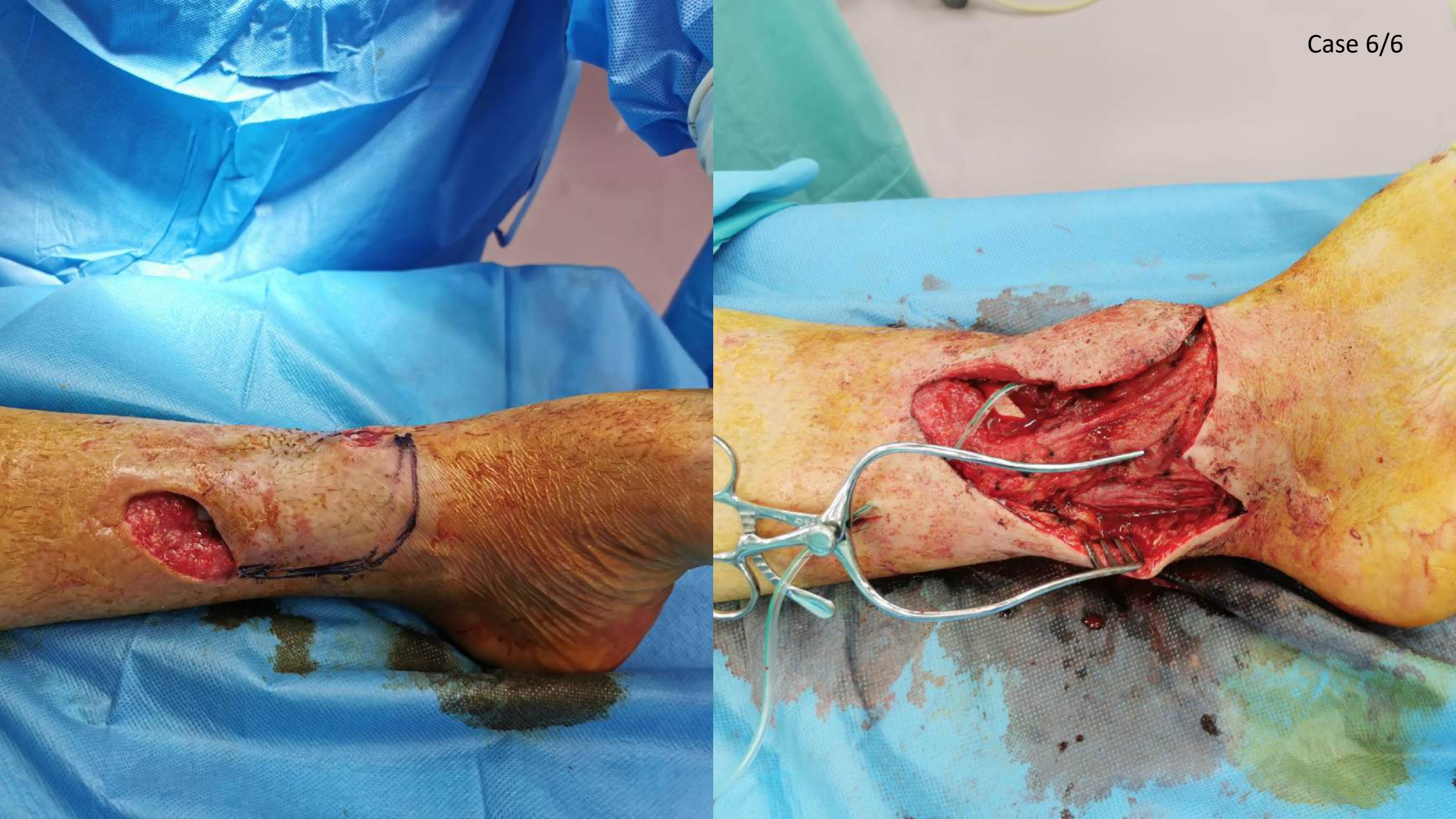


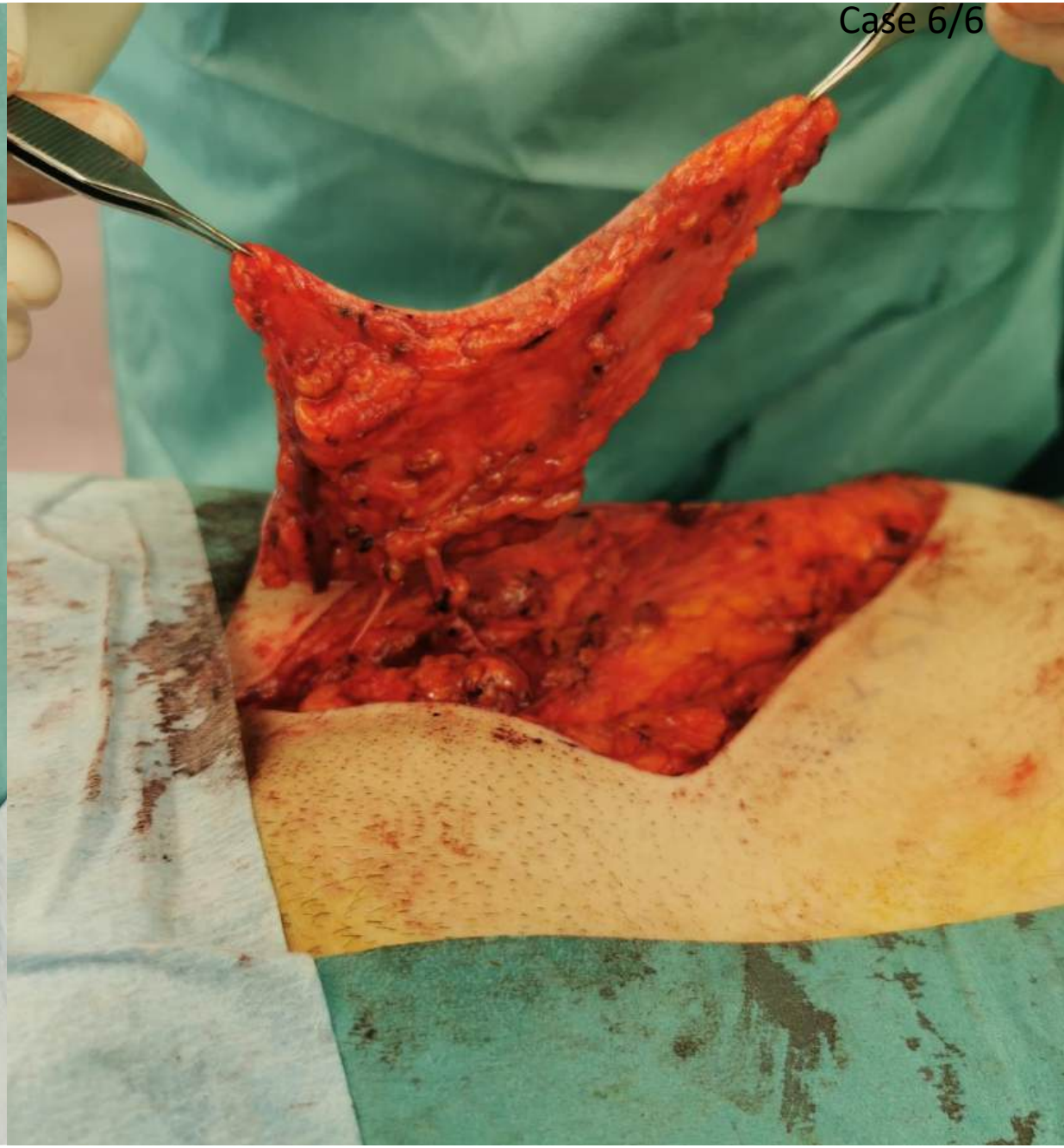




- M 44y, a paratrooper, no comorbidities
- open tibial and fibular fracture (parachute jump)
- treated primarly in local district civilian hospital (intramedullar nail osteosyntesis)




15 x 9



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Nai Ge
UNDERWEAR

Thank you for your attention

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Questions?

Discussion.

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