# Therapy of extensive third degree burns to the lower right leg using TISSUPOR<sup>®</sup> Wound Pads followed by mesh grafts

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## Findings of surgical presentation on 24 November 2000



#### **Anamnesis:**

• Right lower leg with extensive (15 cm x 10 cm area) third degree burns to the skin; amputation risk. Exposed tendons and upper ankle joint. *Result of patient falling asleep on a hot water bottle in September 2000.* 

#### **Pre-existing conditions**:

- Insulin-treated diabetes mellitus type IIb for 20 years
- Late diabetic syndrome with peripheral polyneuropathy and diabetic nephropathy

### Materials and methods:

Initial surgical wound treatment
 TISSUPOR<sup>®</sup> Wound Pads (thick) of sizes 85 mm, 63 mm and 43 mm (from TISSUPOR AG Switzerland)











- Primary necrosectomy on 29 September 2000
  Subcutaneous necrotic tissue along the Achilles tendon
- Swab: pseudomonas aeruginosa
- Extensive soft-tissue infection of the right lateral edge of the foot following burn trauma
- 15 cm x 10 cm ulcer on right lateral of the foot
- Surrounding tissue reddened and indurate
- Leukos 11,400, CRP 32.5
- Exposed Achilles and peroneus tendons. Exposed upper ankle fibulo-tarsal
- Exposed outer ankle
- Upper ankle X-ray:
- 2.5 cm long flat, irregular and partially unclearly defined bone defect on the dorsal circumference of the outer ankle



- Programmed wound examination with change after 4 5 days
- Oral antibiotics acc. to resistogramm
- Swabs taken at start of therapy, during therapy and before the mesh graft







Components fused by ultrasound Ø 85 mm, 63 mm, 43 mm

#### **Therapy:**

Regular changes of conventional bandages outside treatment center; further removal of putrid secretions in the area of the proximal wound poles.

#### **1 December 2000:**

Examination, necrosectomy and resection of the necrotic M. Gastrocnemius; M. Soleus well supplied with blood.

Starting on **18 December 2000** therapy with the TISSUPOR<sup>®</sup> Wound Pads in sizes 43 mm, 63 mm and 85 mm with high absorption capacity. The bandages were changed every 4 - 5 days, enabling removal of the non-vital layer (fibrin) and the establishment of granulation tissue with good blood flow.

21 February 2001: Mesh graft inserted in lower right leg



#### **Summary:**

- Ideal situation for using TISSUPOR<sup>®</sup> Wound Pads on a difficult wound
- Excellent mechanical debridement by Wound Pad
- Rapid reduction of infected bradytrophic tendon tissue; modification into stable granulation tissue





Postoperative check-up on 28 May 2001: Approx. 90% of the mesh graft successful



Presentation on 28 May 2001: Exposed outer ankle completely granulated with inconsequential shallow secondary wound

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- Wound management comfortable for patient
- Time sparing technique
- Ambulatory treatment possible
- Daily change of bandages unnecessary
- Return to original life quality
- Speedy return home
- Approx. 90% of the mesh graft successful
- This case shows that TISSUPOR<sup>®</sup> Wound Pads can be used satisfactorily on extensive burn wounds and that they enable further care using flexible coverings even in cases of difficult wounds.



Presentation during operation on 21 February 2001





Presentation on 16 February 2001: Complete granulation