

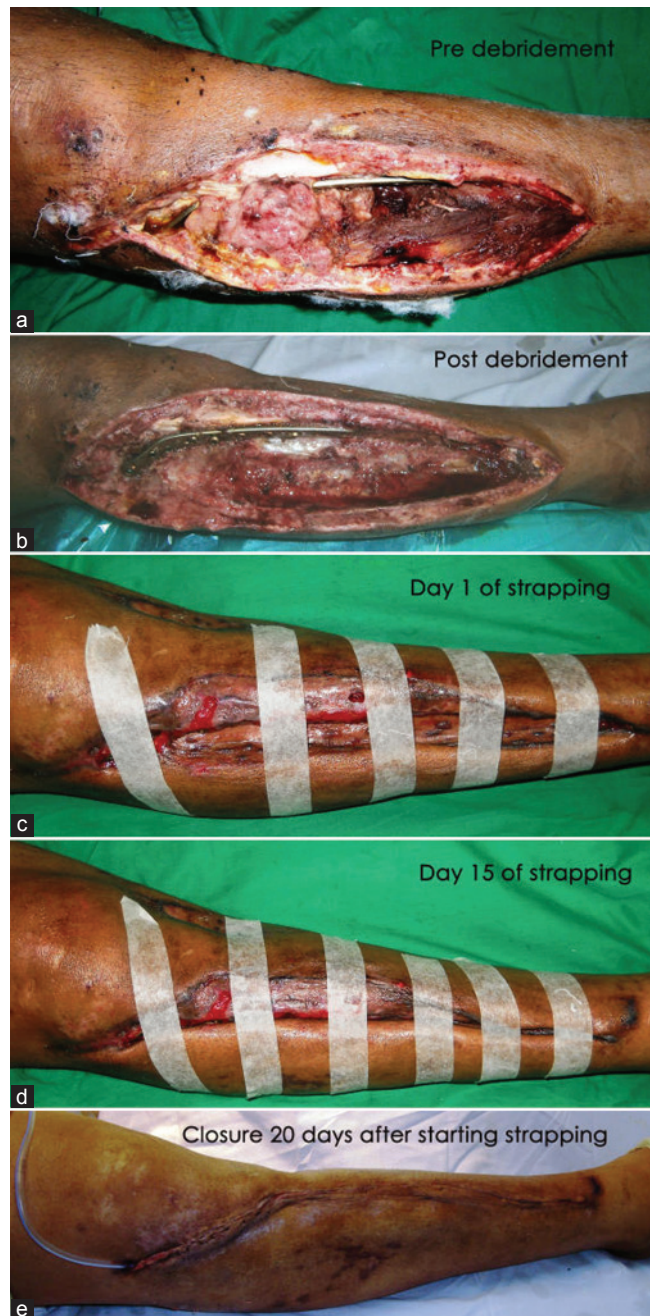
Replacing the displaced tissue in difficult wounds: Reducing the morbidity associated with wound cover

Sir,

The reconstruction of complex lower limb defects is one of the most frequent problems as seen in our clinical practice. The final outcome is assessed by the stability of wound cover, the simplicity and reproducibility of the procedure and the morbidity associated with various donor sites. It is common to see a patient where the apparent defect is much larger than the true defect. In such cases, a close clinical scrutiny reveals that a substantial amount of tissue has been displaced and not actually lost to trauma. In such a scenario, the initial wound care that is carried out by the primary treating surgeon is of vital importance. It has been our experience that efforts to guide the displaced tissue and keep it as closely approximated as possible yields a much smaller wound and may significantly decrease the complexity of surgery required for wound cover. One example of such a case is presented as follows.

A 34-year-old male with history of injury in a road traffic accident presented to us with a complex wound with exposed implants in the superior third of his right tibia. The patient was primarily treated at an orthopedic facility in another hospital and later of our hospital. He had undergone primary stabilization of fractured tibia by internal implants and 4 days later for developing severe infection he went through fasciotomy, multiple debridements, and later the stop gap measure skin grafting to cover the granulating wound. On presentation, the apparent defect was a long 8 × 38 cm defect along the anterior border of right leg with exposed implants in the superior one-third [Figure 1a and b]. The wound was due to an incision taken for surgery for plating the fractured tibia that had been laid open later as the patient developed severe infection and necrosis of underlying bone. There was no actual skin loss instead tissues were lying splayed. The wound was treated by strapping of the wound edges tightly [Figure 1c and d] and application of VAC to help keep soakage to a minimum. Our initial plan for coverage of the defect was a large microvascular transfer of Latissimus dorsi muscle covered with a skin graft. However, the defect was finally managed by primary closure of the entire length of the wound [Figure 1e].

The present case establishes the fact that initial wound care determines the complexity of the surgical procedure required



Figur 1: (a) Clinical photograph of 34 year male shows infection, slough and necrotic soft tissue with implant in situ with large soft tissue gap, (b) Clinical picture immediate after debridement, (c) Strapping was done from the first day (d) Continued with subsequent dressing, (e) Finally, closure of the wound was achieved on 20th day

for reconstruction. VAC therapy has been shown to decrease the size of the flap required;^[1] however, its use in this case was as an adjunct to wound strapping. The present management protocol is simple to apply and does not require complex technical skills for wound cover. Had this protocol been applied before the skin grafting was undertaken, natural wound contraction

would have led to a significant decrease in the wound size. In this era of microvascular surgery simpler and equally effective techniques fail to get mentioned. The basic principles of plastic and reconstructive surgery have stressed the importance of restoration of displaced tissue.^[2] These principles still hold good despite spectacular advances in the surgical techniques. To achieve this goal it has been stressed that good dressing techniques are as important as good surgical techniques.^[3] We recommend that in such cases of complex trauma every attempt should be made to replace normal tissue at its normal location and retain it.

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