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## OBJECTIVE

- To present the utility of split thickness skin grafting for wound management in the setting of Mohs micrographic surgery.

## INTRODUCTION

- Split thickness skin grafting (STSG) is deemed one of the first-line treatment options for skin defect wounds of the lower leg that cannot be closed primarily or where undue tension is predicted<sup>1</sup>.
- The pinch graft technique consists of retrieving a donor graft with the blade kept parallel to the surface of the skin in order to prevent cutting through the dermis into the fat layer<sup>2</sup>.
- We present the use of STSG utilizing the pinch graft technique<sup>2</sup> as an option for hard-to-heal surgical wounds following Mohs micrographic surgery (MMS).

## CASE

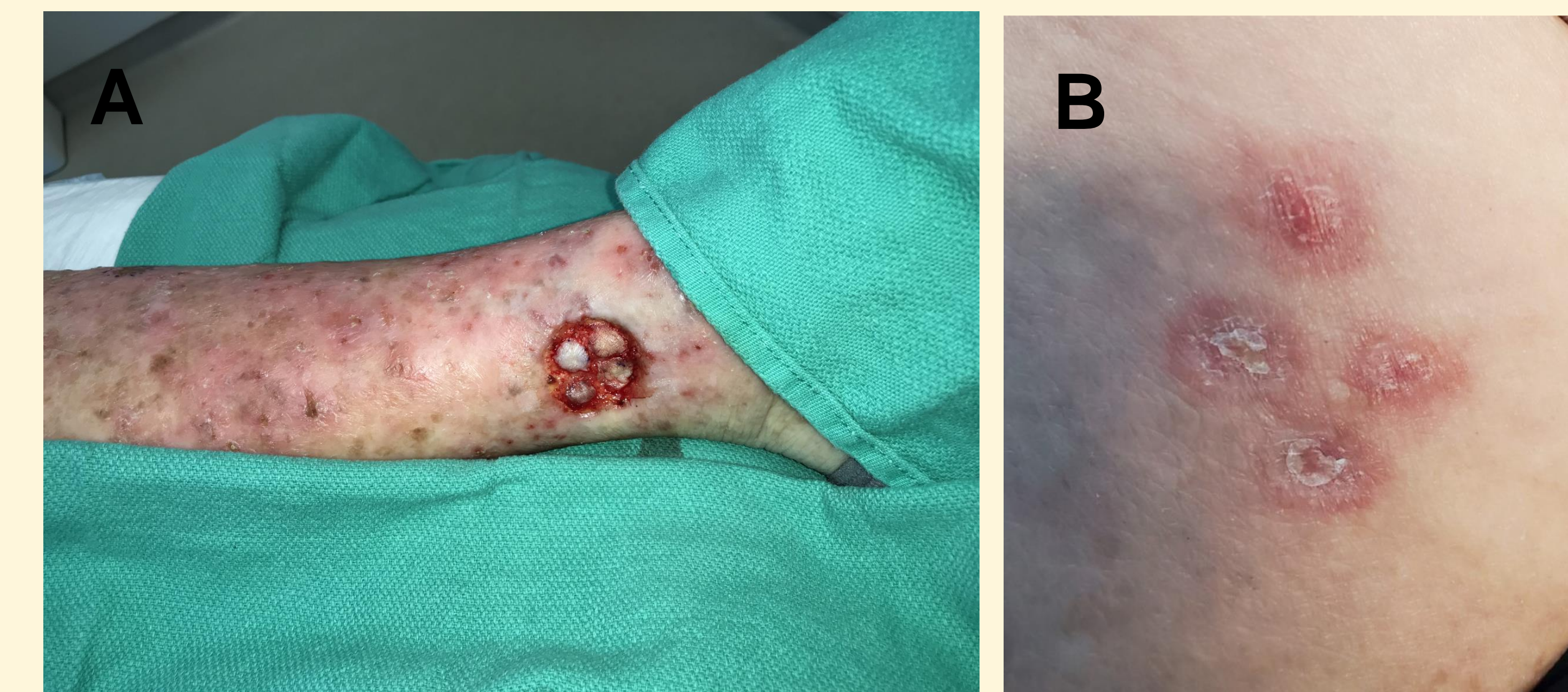
- This 83-year-old female with history of hypertension presented for follow-up of a hard-to-heal surgical wound after Mohs micrographic surgery of melanoma in situ on the left lower leg.
- The 3 x 3 cm surgical defect above the left medial malleolus was initially left to heal by secondary intention, but had no significant improvement after 3 months (**Figure 1A**).
- Split thickness skin grafts in the form of the pinch graft were harvested from the skin at the right inner thigh. Sharp debridement of the recipient site was performed before graft placement (**Figure 1B**).
- The grafts were secured in place by petroleum-jelly-impregnated mesh dressing, adhesive strips, and compression bandaging. Non-adherent pad and film dressing were applied to the donor site post-procedure.
- Furthermore, the patient received a 2-week course of cephalexin 500 mg BID.

- Complete healing at the inner thigh donor site was achieved by the second week. Weekly dressing changes were performed with complete re-epithelialization of the lower leg wound 5 weeks later (**Figure 2**).



**Figure 1. Recipient and donor site before split thickness skin grafting.** Surgical wound (recipient site) with yellow wound bed with raised borders on the left lower leg, post-operative day 90 [A]. Right inner thigh donor site with one graft harvested (arrow) [B]

- Split thickness skin grafting (STSG) offers advantages for optimal patient outcome by allowing for significant surface area coverage with smaller donor sites that heal without need of closure and can even be re-harvested.
- Our case demonstrates the pinch graft technique is a useful and cost-effective treatment option to consider following MMS.



**Figure 2. Recipient and donor site after split thickness skin grafting (STSG).** Surgical wound (recipient site) with harvested STSGs on wound bed [A]. Donor site at 5 weeks post-grafting [B]. Recipient site completely epithelialized at 5 weeks post-grafting [C]

## DISCUSSION

- Surgical wounds may represent a challenge to healing, especially on the lower extremities.

## REFERENCES

- Liu HH, Chang CK, Huang CH, et al. Use of split-thickness plantar skin grafts in the management of leg and foot skin defects. *Int Wound J.* 2018 Oct;15(5):783-788.
- Ogbonna JC, et al. Pinch grafting: An alternative skin grafting technique. *Foot Ankle Surg.* 2022 Sep;2(3):100214.