

Partial-thickness skin graft for melanoma reconstruction. A case report

Daniel Antonio Beltran Valdez M.D.
 Ana Cristina Rosales Nieto M.D.
 Yaneli Madrid Ferto M.D.
 Juan Daniel Naranjo-Hernández M.D.
 Luis Arturo Rubio Artega M.D.
 Alvaro Jose Cortes Salazar M.D.

Puebla, Mexico

Case Report

General Surgery



Background: Objective: To describe a case report of melanoma in situ and treatment with surgical resection with partial thickness graft placement and tie over dressing

Introducción: Most cases of malignant melanoma are diagnosed at an early stage, when surgical excision can be curative. However, patients may present with metastatic disease or develop metastases after their initial definitive treatment.

Case description: 56 year old male with a diagnosis of melanoma in situ which required resection, graft placement and tie over dressing.

Conclusion: The use of tie over secure the grafted skin by delivering persistent downward pressure. Timely resection of melanoma in situ is a surgical procedure that helps reduce the risk of spread and improves the patient's prognosis.

Keywords: Melanoma, Oncoplastic surgery, Tie Over, graft, resection, surgical.

Most cases of malignant melanoma are diagnosed at an early stage, when surgical excision can be curative. However, patients may present with metastatic disease or develop metastases after their initial definitive treatment. The goals of the surgery includes histologic confirmation of the diagnosis, which ideally had been established prior to definitive surgical management through an appropriately planned biopsy, wide excision of the primary melanoma site with an appropriate margin of normal tissue around the primary site to minimize the risk of local recurrence, wide excision of the primary site with optimal functional and cosmetic outcomes. (1)

An autograft is the transfer of skin from a donor site to a recipient site in the same individual. These are the most used grafts for skin reconstruction for a variety of indications. Autografts can be harvested as split thickness or full thickness. Split-thickness skin grafts (STSGs), also called partial-thickness grafts, transfer a portion of the donor site skin, including the epidermis and some of the underlying dermis. This allows the donor site to heal from the epidermal elements left behind through secondary intention, provided that appropriate dermal structures remain viable. Full-thickness skin grafts (FTSGs) harvest the entire layer of skin as the graft. Thus, no dermal or epidermal elements remain at the donor site, which must be closed by direct (primary) closure, local advancement of the adjoining skin, by a secondary local flap, or by using an STSG. (2)

Case report

A 56-year-old male began her current condition 4 years ago prior to being evaluated in a medical consultation due to the progressive growth in the temple area of the face. He therefore attended the dermatology department, where a biopsy was performed, which reported melanoma in situ Breslow 1. He was subsequently referred to the surgical oncology department with a diagnosis of melanoma in situ. Upon evaluation, a dermatosis located on his left temple area of the face was observed, consisting of a macule approximately 3 cm in diameter, irregular and heterogeneous with multiple shades of black (Figure 1). Therefore, an elective outpatient oncoplastic surgery was scheduled, involving resection of the melanoma in situ, partial thickness graft placement and tie over dressing (Figure 2). The patient was followed up with a medical consultation, where favorable clinical progress and wound healing were observed (Figure 3).

Discussion

Skin grafting is a commonly performed operation in plastic and reconstructive surgery. The tie-over dressing is an effective technique to secure the grafted skin by delivering persistent downward pressure. (3)

From the General Surgery Service at Hospital General Fray Junipero Serra ISSSTE, Tijuana, Mexico. Received on July 11, 2025. Accepted on July 18, 2025. Published on July 20, 2025.



Figure 1. Lateral view of the melanoma in the temple area of the face



Figure 2. Tie over after surgery.



Figure 3. Graft view after 1 week of the surgery.

Conflicts of interests

It is declared that there are no conflicts of interest related to the publication of this work.

Acknowledgements

I would like to acknowledge the staff involved in the management of this patient for their excellent work.

References

1. Jeffrey, A. Michael, B. Overview of the management of advanced cutaneous melanoma. UpToDate. 2024.
2. Jorge, L. Dziejulski, P. Marc, G. Kathryn, A. Amy, S. Skin autografting. UpToDate. 2024
3. Hyung, L. Kim, Y. Effectiveness of double tie-over dressing compared with bolster dressing. Archives of Plastic Surgery. Department of Plastic and Reconstructive Surgery. Gachon University Gil Medical Center. Incheon, Korea. 2018.

Daniel Antonio Beltran Valdez
 General Surgery Service
 Hospital General Fray Junipero Serra ISSSTE
 Tijuana, Mexico

Conclusion

Melanoma is a common skin cancer that, when diagnosed in its early stages, can be managed surgically, and its resection can be curative. In this case, the patient was diagnosed at a minimally invasive stage of the tumor, so resection of the lesion contributed to a better prognosis. The placement of a tie-over graft aided the wound's recovery process, and the patient made a favorable outcome.