

# Evaluation and Management of Chronic Non-Healing Wounds in Immunosuppressed Transplant Patients – A Case Study

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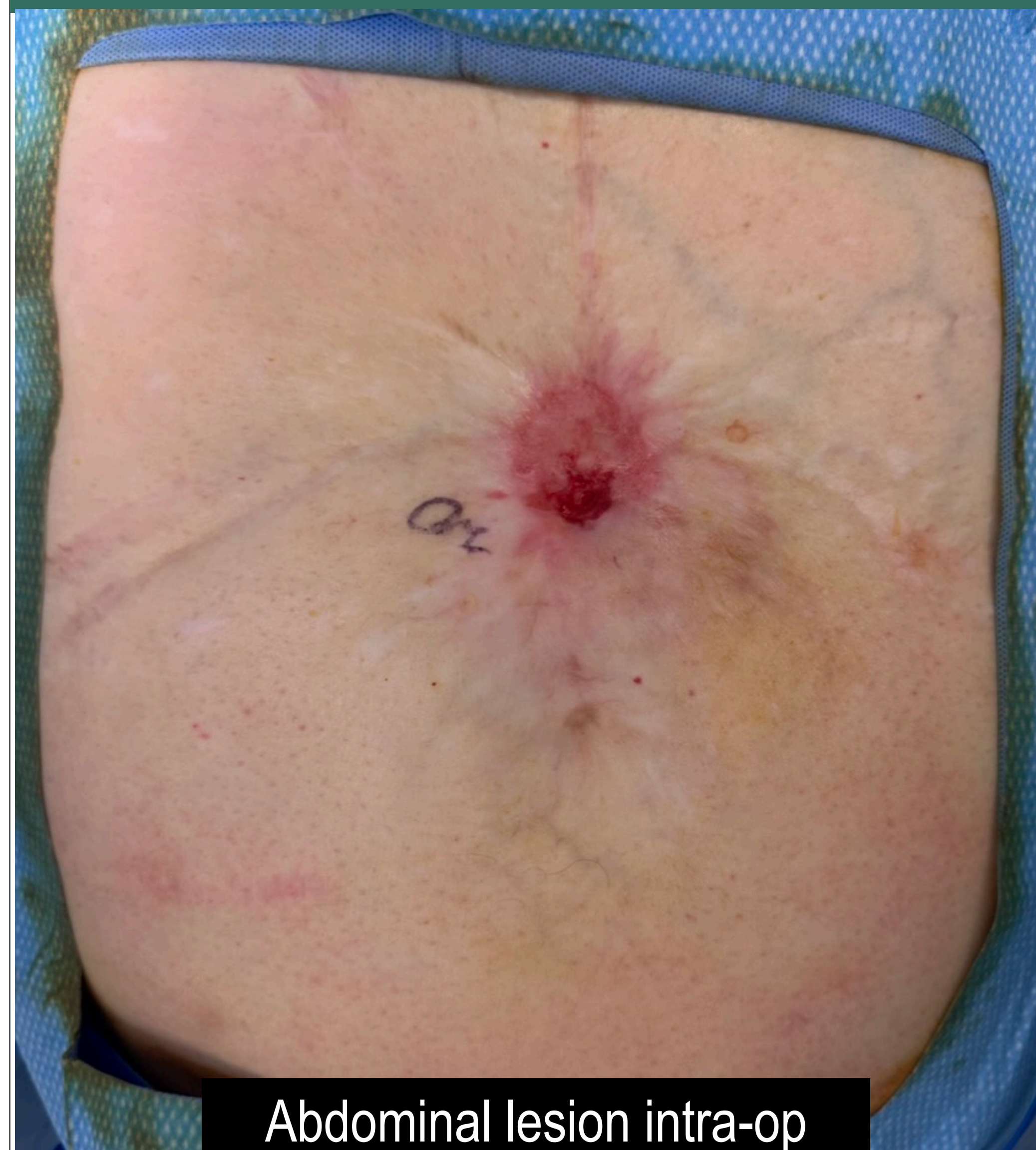
## Background

- The evaluation and management of chronic non-healing wounds represents a difficult clinical challenge, and this process becomes further complicated in patients who are immunosuppressed.
- In this case report, we describe a 65-year-old male with history of orthotopic liver transplant who struggled with evaluation and management of an abdominal wall wound for eight years. We describe the expanded differential and surgical considerations unique to the immunosuppressed population<sup>1</sup>.

## Methods

- A 65-year-old male was evaluated, and prior medical records were reviewed; including a comprehensive history and physical examination, review of previous surgical pathology, wound cultures, and pertinent imaging.
- Operative reports from 3 prior interventions (debridements, biopsies, and placental tissue implantation), as well as notes from 1 year of wound care clinic were examined.
- Review of literature related to the subject of non-healing wounds in the immunosuppressed population was necessary to this patient's care.
- The patient was offered and underwent excision with 1 cm margins.
- There was concern for Marjolin's ulcer with plans for staged wide excision with plastic surgical flap reconstruction of the defect.
- Pathology showed no evidence of malignancy

## Methods



Abdominal lesion intra-op

## Results

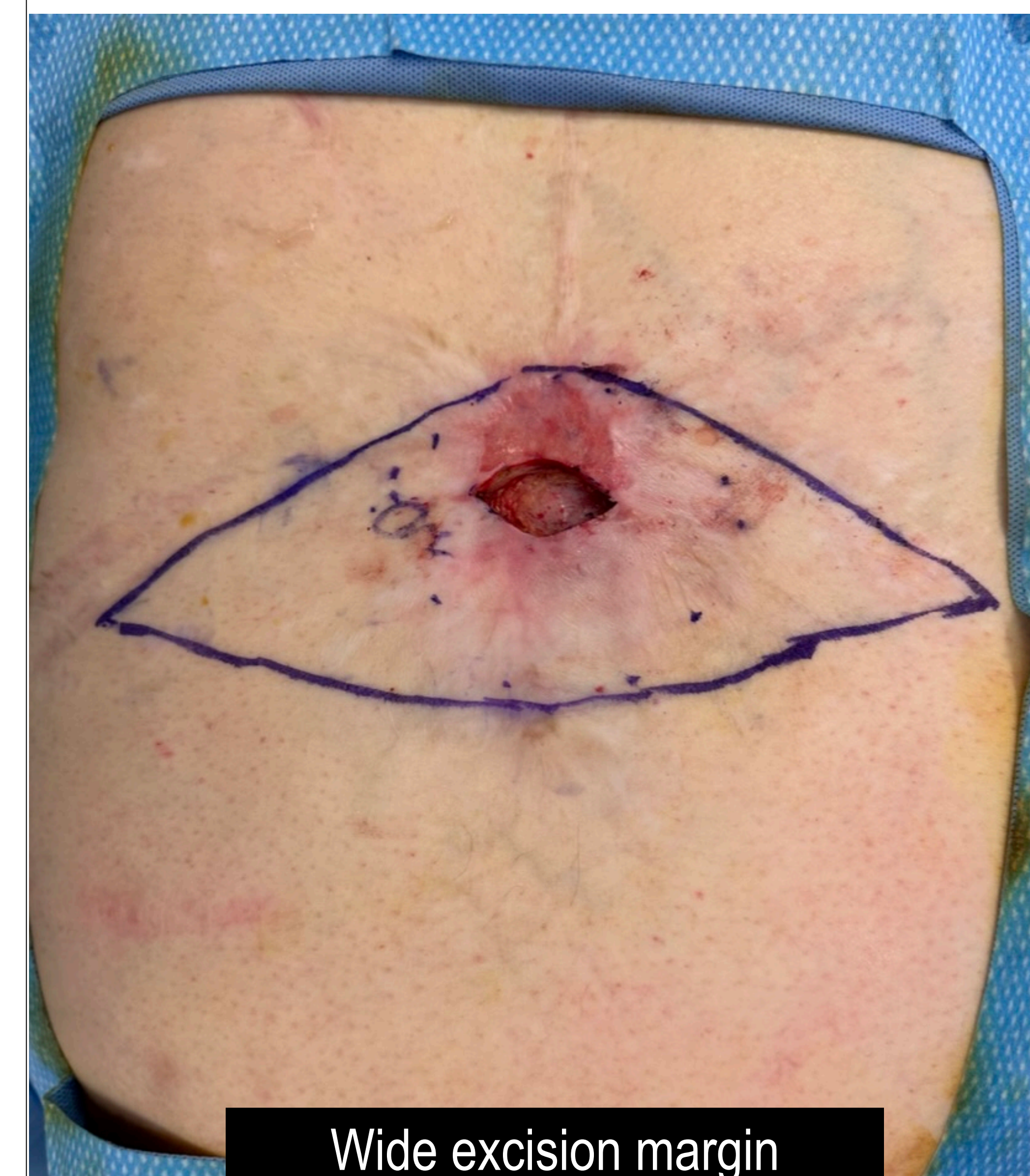
- The differential diagnosis of chronic non-healing wounds is expanded in the immunosuppressed population, with uncommon etiologies to be considered including infection, malignancy, noninfectious inflammatory processes.
- Uncommon infectious processes may include acid-fast, atypical bacterial, fungal, and viral infection. Malignant processes are of increased incidence with immunosuppression, and may include Marjolin's ulcer of squamous cell, basal cell, or sarcoma histologic variants<sup>2</sup>.
- Noninfectious inflammatory processes may include autoimmune or foreign-body reactions.
- When clinical signs suggest possible malignant etiology, management should include early tissue diagnosis and staging before definitive intervention<sup>3</sup>

## Results

- This patient was found to have ulceration with underlying fibrosis and no evidence of fungal growth or malignancy. They will continue surveillance and screening.



Lesion excised



Wide excision margin

## Results



Healed lesion (3 months post-op)

## Conclusion

- A wide differential is needed in the evaluation of non-healing wounds in the immunosuppressed population.
- With an increased incidence of malignant change and Marjolin's ulcer, early biopsy should be considered, and cultures for atypical pathogens may be beneficial.
- The wound clinician should consider these etiologies when managing non-healing wounds in immunosuppressed transplant patients.

## References

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2. Gerlini G, Romagnoli P, Pimpinelli N. Skin cancer and immunosuppression. *Crit Rev Oncol Hematol.* 2005; 56(1): 127-136.
3. Khan K, Schafer C, Wood J. Marjolin Ulcer: A Comprehensive Review. *Advances in Skin & Wound Care* 2020; 33(12):629-634.