Postoperative Outcomes for Immunosuppressed Hidradenitis Suppurativa Patients undergoing Soft Tissue Reconstruction.

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INTRODUCTION

- **Hidradenitis Suppurativa (HS)** is a chronic inflammatory disease of the hair follicles. (1)
- Management varies by severity, with mild cases treated through lifestyle modification and antibiotics, and **severe cases** requiring **immunomodulators or surgical excision.**
- Given the recurrent nature of HS and frequent immunomodulator use, it is important to assess whether these patients are at higher risk for complications following plastic surgery.
- Study Aims: 1) Do **HS patients undergoing excision and soft tissue coverage** experience wound **infections, readmission, or complications,** and 2) is **immunomodulator use** is associated with **adverse outcomes.**

METHOD

- **Retrospective cohort study** using the **ACS NSQIP database** (January 2016-December 2023) to identify patients with a diagnosis of **HS** (ICD-10 L73.2) who underwent **soft tissue coverage** with flaps, grafts, or tissue transfers (CPT codes 15734, 15736, 15738, 15740; 14301; and 15200, 15220, 15240, 15271, 15273, 15274, 15275, 15277, respectively).
- Patients were stratified by whether soft tissue coverage was coded as a **primary or secondary procedure.**
- Variables extracted include demographics, immunosuppressant use, transfusion status, albumin level, and BMI.
- Outcomes: wound dehiscence, deep incisional surgical site infection (SSI), hospital readmission, length of time before hospital readmission, and whether hospital readmission status was related to the primary CPT code.
- Analyses performed in SPSS using **Chi-square** and **Fisher's Exact tests.**

RESULTS

- Fisher's Exact test revealed significant associations between **general immunosuppressant use** and **readmission** (p=0.022), **biologic DMARD/DMD use** and **readmission** (p=0.007), **general immunosuppressant use** and **days until readmission** (p=0.023), and **biologic DMARD/DMD use** and **days until readmission** (p=0.008).
- Wound infections were reported in 55 patients (17.9%), wound dehiscence occurred in 20 patients (6.5%), and 19 patients were readmitted (6.2%).
- **No significant associations** were observed **between procedure type** and **outcomes**, including wound healing.

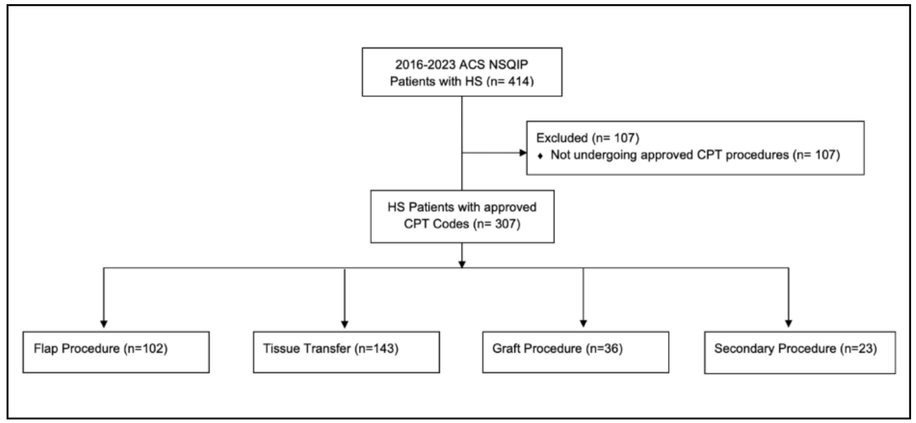

Figure 1. Patient selection and categorization process according to procedure.

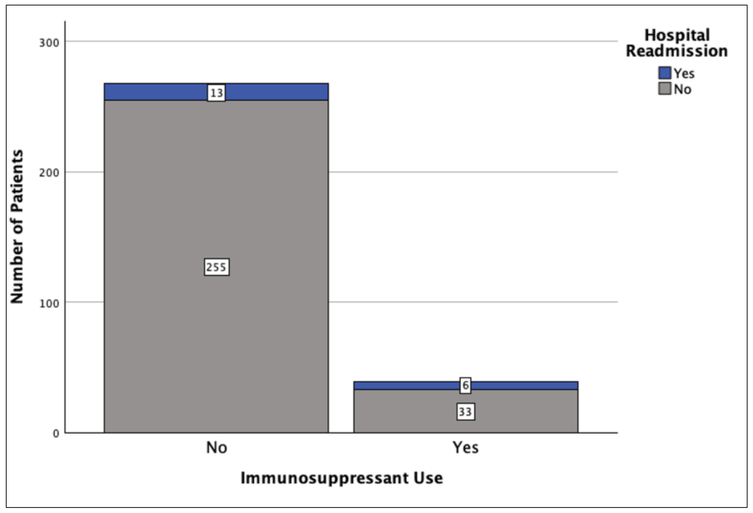

Figure 2. Hospital readmission stratified by patient immunosuppressant use.

CONCLUSIONS

- **Perioperative immunosuppressant medication use** in **HS patients** undergoing flap, graft, and tissue transfer procedures may pose a **higher risk for negative postoperative outcomes**
- **Biologic DMARDs/DMDs** are associated with **increased rates of readmission** following soft tissue reconstructive procedures.

LIMITATIONS & NEXT STEPS

- **Further studies** are warranted to explore the association between **various procedures** and **wound healing in HS patients**.
- These findings should encourage providers to be **thorough in preoperative consultations** regarding **medical management, surgical candidacy,** and **postoperative expectations.**

DISCLOSURES

- No Disclosures. Project has been submitted but not accepted to several national meetings.

REFERENCES

1. Zouboulis CC, Benhadou F, Byrd AS, et al. What causes hidradenitis suppurativa ?—15 years after. *Exp Dermatol*. 2020;29(12):1154-1170. doi:10.1111/exd.14214