



## Reconstruction after Excision of Hidradenitis Suppurativa: Are Skin Grafts Better than Flaps?

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Sir:

Sugio et al.¹ have recently published in *Plastic and Reconstructive Surgery Global Open* a very interesting case report entitled "Reconstruction after Excision of Hidradenitis Suppurativa: Are Skin Grafts Better than Flaps?" They present a case of bilateral inguinal hidradenitis suppurativa (HS) that was first treated with excision and bilateral inguinal flaps. Due to flap loss in the right side, a mesh skin grafting was performed. Based on the observation that the patient presented (there was recurrence in the left side but no recurrence at the right side), they concluded that "...skin grafting, which does not contain cutaneous appendages, may be superior to flap repair or primary closure in terms of recurrence."

HS is currently considered to be an inflammatory disease of the pilosebaceous follicle. The association between HS and autoinflammatory diseases, together with clinical and laboratory findings, the effectiveness of tumor necrosis factor alpha blockers, and the recent approval of adalimumab, a tumor necrosis factor alpha–inhibiting drug, confirm the importance of inflammation.<sup>2-4</sup>

Surgery plays an important role for scarring areas, wide fistulas, and recalcitrant abscesses that do not respond to medical therapy. A systematic review by Mehdizadeh et al.<sup>5</sup> found that wide excision presented the lowest recurrence rate (13%). In the wide excision group, the recurrence rates were 15% [95% confidence interval (CI), 0–72%] for primary closure, 8% (95% CI, 2–16%) for flaps, and 6% (95% CI, 0–24%) for grafts. What is generally accepted among surgeons with experience in HS surgery is the fact that the wider the resection, the lower the local recurrence rate is. Probably, confounding is present in this study; wider resection could be associated with reconstruction with skin grafts because it is easier to use skin grafts than flap for bigger defects, and wider resection is associated with lower recurrence rates.

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The surgery of the HS would be indicated for all those symptomatic sequelae secondary to the chronic inflammation. The hypertrophic scars resulting from chronic inflammation are superinfected, and this situation favors repetitive suppurative episodes despite a well-controlled inflammatory activity.4 One of the basic principles in HS surgery is a wide and complete three-dimensional resection of the affected area. The second basic principle is stable coverage and "like-with-like" reconstruction. Fasciocutaneous flap offers a stable coverage and better aesthetic results. The axillary is a common area for HS, and it is not uncommon to expose the axillary vessels and brachial plexus after a complete resection. Is not safe to cover the axillary vessels and brachial plexus with a mesh split-thickness skin graft. In the case report presented by Sugio et al., the cause of a local recurrence could have been the presence of minor lesions in the flap area before the flap harvesting (Fig. 1).

In conclusion, according to our experience and previous published studies, we believe that the 3 main principles in HS are a presurgical systemic inflammation control and when surgery is finally needed, performing a wide resection followed by a stable coverage using the like-with-like reconstruction principle.

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## **DISCLOSURE**

The authors have no financial interest to declare in relation to the content of this article. The Article Processing Charge was paid for by the authors.

## REFERENCES

- Sugio Y, Tomita K, Hosokawa K. Reconstruction after excision of hidradenitis suppurativa: are skin grafts better than flaps? *Plast Reconstr Surg Glob Open* 2016;4:e1128. DOI: 10.1097/ GOX.00000000000001128.
- Kelly G, Sweeney CM, Tobin AM, et al. Hidradenitis suppurativa: the role of immune dysregulation. *Int J Dermatol.* 2014;53:1186–1196.
- Martorell A, García-Martínez FJ, Jiménez-Gallo D, et al. An update on hidradenitis suppurativa (Part I): epidemiology, clinical aspects, and definition of disease severity. Actas Dermosifiliogr. 2015;106:703–715.
- 4. Kelly G, Prens EP. Inflammatory mechanisms in hidradenitis suppurativa. *Dermatol Clin.* 2016;34:51–58.
- Mehdizadeh A, Hazen PG, Bechara FG, et al. Recurrence of hidradenitis suppurativa after surgical management: a systematic review and meta-analysis. J Am Acad Dermatol. 2015;73:S70–S77.