UNUSUAL PRESENTATION OF HIDRADENITIS SUPPURATIVA WITH MASSIVE ENLARGEMENT OF PENIS

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ABSTRACT

Hidradenitis suppurativa is a chronic, recurrent inflammatory disease affecting the cutaneous apocrine glands and resulting in their obstruction. This enigmatic disease causes recurrent episodes of infection, edema, scarring, and fibrosis of surrounding tissues. We present the case of a 55-year-old man with two decades of inguinal hidradenitis suppurativa that resulted in extensive penile subcutaneous lymphedema and enlargement secondary to scarring and obstructive lymphadenopathy. Reconstructive phalloplasty to restore normal penile function was required. Minimal recurrent induration, normal cutaneous sensation, and normal voiding and erectile function were noted at 3 years of follow-up. UROLOGY 64: 377.e19–377.e20, 2004. © 2004 Elsevier Inc.

CASE REPORT

Our patient was a 55-year-old black man with active HS for nearly two decades. Despite multiple surgical procedures for severe inguinal, gluteal, and perianal disease, extensive disease persisted. Ten years of persistent, extensive penile swelling warranted urologic referral.

On examination, he presented with a markedly enlarged, indurated penis, measuring 15 × 20 cm (Fig. 1). The ventral penis was massively enlarged, resulting in an inferior displacement of otherwise normal lower abdominal skin to the dorsal penis. Despite inflammatory and fibrotic changes at the gluteal cleft and perineal tissues, the scrotum was uninvolved. No fistulas, malignancy, or urethral abnormalities were noted on examination or radiologic evaluation.

Tissue resection and a split-thickness skin graft (STSG) were considered; however, tissue infection and graft loss were likely because of concurrent...
skin infections in close proximity. Additionally, tissue contracture and scarring can occur with STSGs, and the patient desired normal sensation. Therefore, reconstruction was performed through a distal circumcising incision with complete excision of histologically benign indurated penile tissue (more than 5 lb) and preservation of the proximal dorsal abdominal skin, creating a full-thickness dorsal skin flap. This flap was approximated to the original distal circumcision edge, wrapped circumferentially around the penis, and reapprroximated ventrally, forming a neoraphe (Figs. 2 and 3). Minimal recurrent induration, normal cutaneous sensation, and normal voiding and erectile function were noted at 3 years of follow-up.

**COMMENT**

HS is a chronic infectious and inflammatory disease of unknown etiology, commonly affecting the skin in the axillary, inguinal, and perianal regions. HS appears to be more common in the black and female populations and is associated with an increased incidence of cutaneous squamous cell carcinoma. Although HS affecting the penis has not been reported, successful resolution of HS with scrotal elephantiasis, urethral fistula, and partial scrotal excision with grafting have been reported. Most cases appear to involve the thinner scrotal skin, which is more susceptible to the edematous changes from chronic inguinal inflammation. An STSG would appear to be the treatment of choice in most circumstances; however, STSGs are insensitive, can shrink up to 50%, and can potentially leave an unsightly mesh appearance—undesirable characteristics for penile reconstruction. Additionally, active HS involvement in close proximity risks graft infection and loss. A local vascularized tissue transfer was not possible, because all available skin was scarred from previous HS infections. Therefore, the translocated abdominal skin provided the necessary “skin graft” and continued to perform well at last follow-up.

**CONCLUSIONS**

Although HS is rare, it can potentially involve the penis, scrotum, or labia, requiring reconstructive surgery. Individualized diagnostic procedures and treatment to restore normal anatomy and function are necessary. We found that a dorsal penile full-thickness skin flap provided excellent phallic coverage, maintained cutaneous sensation, restored erections, and was without immediate or long-term complications. We believe it has many advantages over an STSG in these cases and recommend its use whenever possible.

**REFERENCES**