Surgical Intervention for a Penoscrotal Ulcer: A Note of Caution

Letter to the Editor:

A 51-year-old Taiwanese man presented with an occasionally tender, ulcerative lesion on his ventral penile-scrotal region and several flesh-colored papules around the perianal and penile regions (Figure 1). The ulcerative plaque at the penile base had first appeared almost 30 years before. During this period, incomplete healing of the site, with small amounts of mucous-like discharge, had been noted intermittently. Poor response to various topical agents, including antibiotics and some wound care products, was reported over the ulcerative lesion. The verrucous papules had been noted for approximately 1 month. He denied having any recognized previous traumatic injury to the penile or scrotal regions, contact allergy, or unprotected sexual encounters before the first manifestation of the ulcerative plaque. Sexual intercourse did not worsen the lesion. The patient's prenatal history was unremarkable, and his bowel habits were normal. Seronegativity for syphilis and human immunodeficiency virus were confirmed using rapid plasma regain titer and particle agglutination test, respectively. Thereafter, he received an excisional biopsy under the clinical impression of chronic ulcer with possible infection or malignant change. For the verrucous papules, liquid nitrogen cryosurgery was performed under the clinical impression of condyloma accuminata. About 20 minutes after completion of the biopsy excision and suturing, the patient returned to our clinic complaining of dysuria and micturation difficulty, compounded with hematuria. After immediate consultation with a urologist, removal of the stitches and insertion of a urethral catheter were done; the catheter was exposed through the skin defect. Thereafter, he was sent to the operating room for wound repair and urethral reconstruction. The Buck's fascia was exposed with a transverse tear in the tunica albuginea overlying the corpus spongiosum. The transverse tear was approximated using primary suturing, and the subsequent postoperative recovery was uneventful.

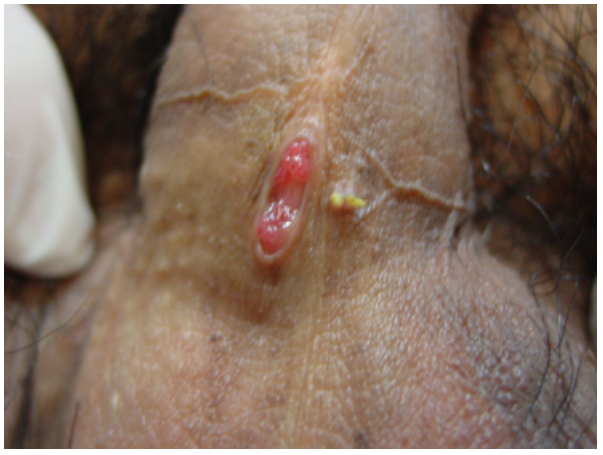

Figure 1. An erythematous ulcerative plaque on penoscrotal site with one adjacent verrucous papule.

Histological findings of the excised ulcerative tissue shown in Figure 2 revealed two tract-like spaces in close proximity. Transitional epithelia completely lined one, and mixed squamous and transitional epithelia with moderate to marked chronic inflammation in the surrounding stroma lined the other. Based on the clinicopathological findings, we considered a primary anomaly of the urethra with diverticulum or chronic secondary change with fistula formation.

Urethral diverticula and fistula are rare in male patients. Most of them are acquired from infection, sepsis, stone, or obstruction and others by damage during urethral instrumentation, surgical procedures, or pelvic fracture.[1,2] A diverticulum or a fistula formed after partial rupture of the bulbar urethra may have been the cause in this case, although the patient denied having any recognized injury to the penile or scrotal regions or previous history of urogenital infection.

In conclusion, neither urethral diverticulae nor fistulae are common clinical entities. These lesions,

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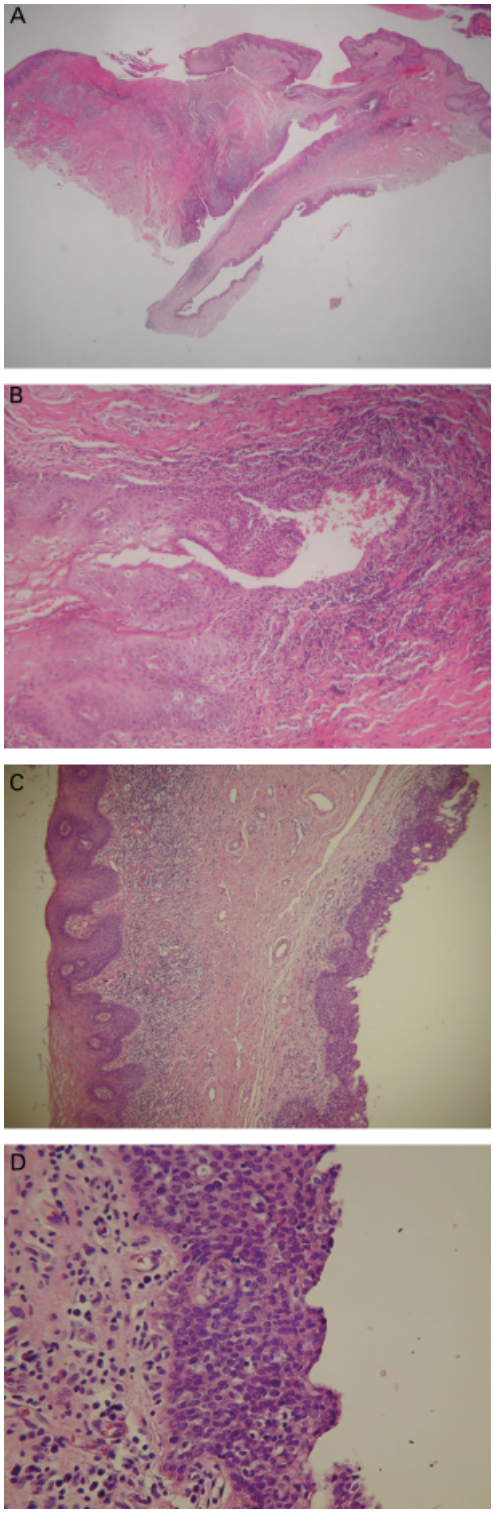

Figure 2. (A) Ulcerative tissue with two tract-like spaces found (hematoxylin-eosin (H&E) stain; original magnification: × 10). (B, C) The two tract-like spaces: one completely lined with transitional epithelia and the other with squamous epithelia with fibrin exudates and mixed acute and chronic inflammatory cell infiltration in the surrounding stroma. The latter was connected with the outer skin squamous epithelium (H&E stain; original magnification: × 100). (D) Higher magnification of the transitional epithelia (H&E stain; original magnification: × 200).

especially when associated with cutaneous manifestations, may sometimes be difficult to differentiate from others due to infectious or malignant etiologies. A urethral catheterization during primary assessment or during the process of surgery might be a simple and useful procedure to avoid a misdiagnosis. Furthermore, a micturating cystourethrogram or urethroscopy might be necessary for a better definition of the wound. The case herein presented provides significant cautionary insight to the practicing dermatologist into ulcerative lesions of the penile or scrotal regions and indicates that combined care with urology for more complicated lesions is preferable and beneficial.

References

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