

Cutaneous Vulvar Metastases in a Patient With Anal Squamous Cell Carcinoma

David R. Wise, PhD; Brian S. Kim, MD; Katalin Ferenczi, MD; Misha Rosenbach, MD

Metastatic disease of the skin can be difficult to diagnose, particularly when lesions occur in unusual anatomic locations. We report the case of an 80-year-old woman with a history of anal squamous cell carcinoma (SCC) who developed genital ulcers. Biopsy of the lesions revealed features consistent with metastatic SCC. Cutaneous metastases are an infrequent cause of genital ulcerations, and it is important for physicians to consider this entity when evaluating genital ulcers in patients with prior malignancies.

Cutis. 2013;91:125-126.

Case Report

An 80-year-old woman with a history of stage III (T3N1M0) anal squamous cell carcinoma (SCC) presented with genital ulcers. She had been diagnosed with anal SCC 1 year prior to presentation that was treated via surgical resection. The patient developed a local recurrence that was treated with mitomycin, 5-fluorouracil, and radiation therapy. Two months prior to presentation, positron emission tomography-computed tomography imaging showed a large necrotic tumor in the right inguinal region that was consistent with local recurrence; it was surgically resected. Two days posttreatment, the patient developed mild erythema of the groin that improved with treatment with intravenous vancomycin and oral trimethoprim-sulfamethoxazole. Six weeks posttreatment and 2 weeks prior to presentation, the patient again developed erythema at the surgical site

on the inguinal fold extending to the mons pubis and labia that improved with treatment with intravenous vancomycin and oral trimethoprim-sulfamethoxazole. On presentation at our institution, the patient again reported groin erythema that now was associated with painless vaginal ulcers; the erythema did not respond to treatment with intravenous ertapenem sodium and oral valacyclovir, which previously had been administered at an outside institution. Clinical evaluation of the patient revealed a painless, erythematous, indurated plaque across the mons pubis extending to the labia majora as well as painless ulcers of the bilateral labia majora (Figure 1). Results of a direct fluorescent antibody test and viral culture were negative for



Figure 1. Indurated, erythematous, ulcerated plaques on the right labia majora and the medial aspect of the left labia majora.

Dr. Wise is from the University of Pennsylvania School of Medicine, Philadelphia. Drs. Kim and Rosenbach are from the Department of Dermatology, University of Pennsylvania. Dr. Ferenczi is from the Department of Dermatology, University of Connecticut Health Center, Farmington.

The authors report no conflict of interest.

Correspondence: Misha Rosenbach, MD, Hospital of the University of Pennsylvania, Department of Dermatology, 3600 Spruce St, 2nd Floor, Maloney Bldg, Room 2M47, Philadelphia, PA 19104 (Misha.Rosenbach@uphs.upenn.edu).

herpes simplex virus. Histologic analysis of a 4-mm punch biopsy of 1 ulcerated lesion revealed a solid tumor composed of atypical squamous cells with large pleomorphic nuclei, necrosis, and mitoses (Figure 2), all features that are consistent with a moderately differentiated SCC.

Comment

Cutaneous metastases can occur as a direct extension of underlying tumors or spread via hematogenous or lymphatic routes. Cutaneous metastases are uncommon, occurring in 0.7% to 9% of internal malignancies,¹ and rarely are reported in cases of colorectal cancers with a prevalence of less than 1%.² The incidence of cutaneous metastases in anal SCCs is even lower, with only a single known case reported in a series of 373 patients.³ The vulva previously has been reported as a rare site of cutaneous metastases, most commonly associated with primary tumors of the female reproductive and genitourinary tracts, but also can result from tumors in the breast, esophagus, and rectum, as well as malignant lymphoma.^{4,5} Matsuo et al⁶ reported a case of anal cancer metastasizing to the vulva in a 45-year-old woman with Crohn disease who presented with a primary anal adenocarcinoma arising from a perianal fistula that had metastatically invaded the clitoris.

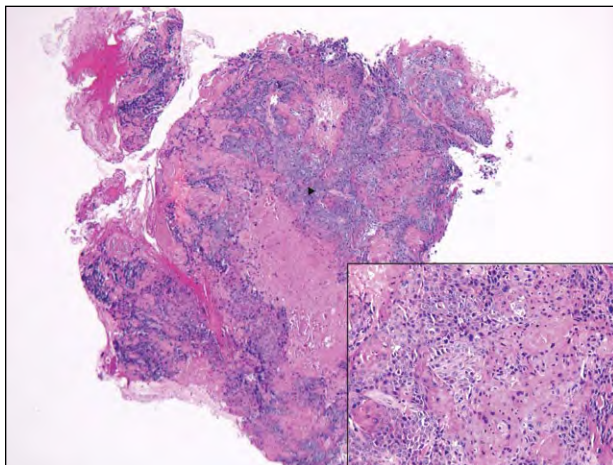


Figure 2. Microscopy of the lesion on the right labia revealed atypical squamous epithelial proliferation (H&E, original magnification $\times 40$). Cellular atypia and pleomorphism within the lesion also were demonstrated (H&E, original magnification $\times 600$ [inset in right bottom corner]).

The differential diagnosis for painless and indurated vulvar ulcers is broad and includes infection, inflammatory conditions, trauma, and malignancy.⁷ Infectious etiologies include syphilis, herpes simplex virus, Epstein-Barr virus, cytomegalovirus, chancroid, granuloma inguinale, and lymphogranuloma venereum. Inflammatory etiologies include hidradenitis suppurativa, Behçet disease, pyoderma gangrenosum, and Crohn disease. Malignant etiologies include primary vulvar SCC, primary vulvar basal cell carcinoma, and metastatic disease. Vulvar ulcers in elderly patients can result from multiple etiologies; metastatic disease to the vulva is rare.⁷

Conclusion

Our patient's ulcerative lesions likely represent cutaneous metastases of anal SCC. The diagnostic evaluation of a patient with an internal malignancy who presents with indurated and painless ulcerative lesions of the skin should include the possibility of metastatic disease.

REFERENCES

1. Wang AR, O'Brien M, Ross R, et al. Epidermotropic metastasis from vulvar squamous cell carcinoma: a rare cutaneous manifestation [published online ahead of print March 11, 2010]. *J Am Acad Dermatol*. 2010;63:1088-1091.
2. Hu SC, Chen GS, Wu CS, et al. Rates of cutaneous metastases from different internal malignancies: experience from a Taiwanese medical center [published online ahead of print December 3, 2008]. *J Am Acad Dermatol*. 2009;60:379-387.
3. Klotz RG Jr, Pamukcoglu T, Souillard DH. Transitional cloacogenic carcinoma of the anal canal. clinicopathologic study of three hundred seventy-three cases. *Cancer*. 1967;20:1727-1745.
4. Trochez-Martinez R, Barrington J. A case of vulval metastasis from oesophageal carcinoma. *J Obstet Gynaecol*. 2008;28:557-558.
5. Dehner L. Metastatic and secondary tumors of the vulva. *Obstet Gynecol*. 1973;42:47-57.
6. Matsuo K, Hew KE, Im DD, et al. Clitoral metastasis of anal adenocarcinoma associated with rectovaginal fistula in long standing Crohn's disease [published online ahead of print April 29, 2009]. *Eur J Obstet Gynecol Reprod Biol*. 2009;144:182-183.
7. Foster DC. Vulvar disease. *Obstet Gynecol*. 2002;100:145-163.