Dermatology Practical & Conceptual

Painful Ulcers Affecting The Genitalia

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Case Presentation

A 31-year-old man visited the dermatology clinic with three painful firm ulcers that had appeared on his genitals 3 months earlier. He had no known systemic diseases, recent illnesses or medication use. Physical examination revealed two ulcers on the glans and one on the penis (Figure 1, A and B). A skin biopsy showed mild epidermal hyperplasia and localized spindle cell nodular hyperplasia in the dermis (Figure 1C). The tumor cells exhibited mild to moderate pleomorphism without apparent mitoses or intracytoplasmic vacuoles. Immunohistochemistry results indicated positive staining for pan cytokeratin, ERG, CD31, FOSB, Desmin, INI-1, and Ki-67 (+15%) and negative staining for CD34, SMA, and S100. These findings confirmed the endothelial nature of the tumor cells, leading to a final diagnosis of Pseudomyogenic hemangioendothelioma (PHE). Despite the recommendation for extensive local excision, the patient declined, and no metastases were observed during two years of follow-up.

Teaching Point

PHE predominantly affects young males and is most commonly found in the extremities, with over half of cases in the lower limbs [1]. This case is noteworthy due to its rare presentation on the genitals. Clinical manifestations are nonspecific, with skin lesions appearing as single or multiple painful nodules involving the dermis, subcutaneous tissue, muscle and bone tissue [2]. PHE has been reported in various anatomical sites, including bone, thoracic spine, penis, lips, scalp and chest, but penile cases remain rare [1,2]. Diagnosis primarily relies on histopathological and immunohistochemical staining. Histologically, PHE tumors consist of ovoid and short spindle cells with eosinophilic cytoplasm, arranged in nodular, sheet-like, and fascicular patterns [1]. Differential diagnoses include epithelioid sarcoma, epithelioid hemangioendothelioma, dermatofibrosarcoma protuberans, Kaposi sarcoma, and rhabdomyosarcoma.

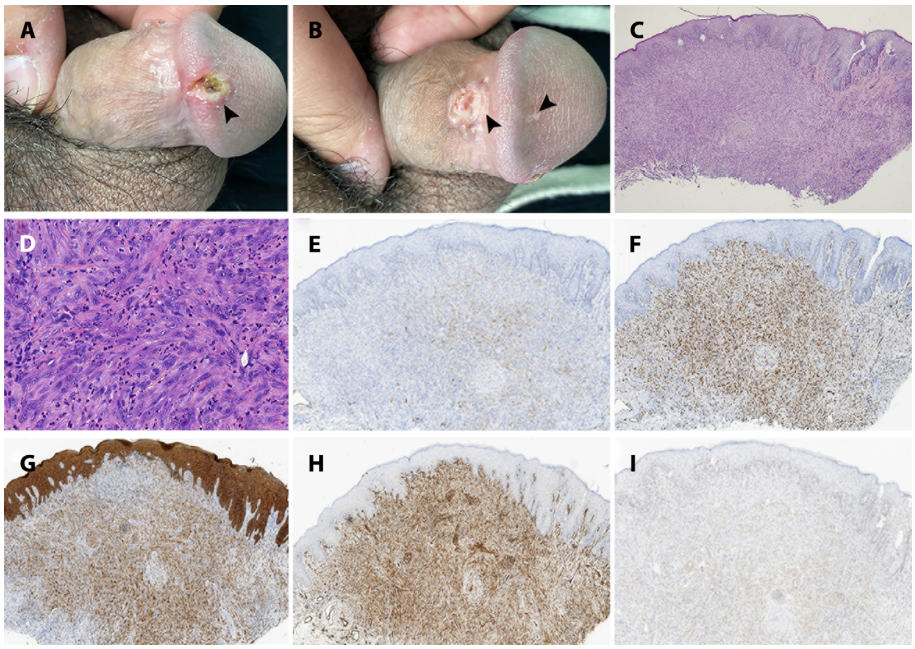

Figure 1. (A, B) Physical examination revealed two painful firm ulcers on the glans and one painful firm on the penis. (C) Mild epidermal hyperplasia and localized spindle cell nodular hyperplasia in the dermis (H&E; x40). (D) The tumor cells exhibit mild to moderate pleomorphism without apparent mitoses or intracytoplasmic vacuoles (H&E; x400). Immunohistochemistry results were positive for Desmin (E, x40), ERG (F, x40), pan cytikeratin (G, x40), CD31 (H, x40), INI-1 (I, x40).

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