

Extensive Fibroepithelial-like Polyps on The Foot of an AIDS Patient Following Radiotherapy for Kaposi's Sarcoma

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Abstract

Fibroepithelial polyps, also named as soft warts, skin tags, or acrochordons, are common benign lesions that may occur on trunk or extremities. Its association with infectious agents is unclear. Herein, We report a case of extensive fibroepithelial -like polyps on the foot of an AIDS patient following radiotherapy for Kaposi's sarcoma. (*Iran J Dermatol 2009;12 (Suppl): S5-S7*)

Keywords: fibroepithelial polyp, AIDS, Kaposi sarcoma, radiotherapy

Case Report

A 37-year-old lady, diagnosed with Acquired Immunodeficiency Syndrome (AIDS) one year ago, was visited with extensive 2-month skin lesions on the right foot following radiotherapy for epidemic Kaposi's sarcoma. Her CD4 count at the time of diagnosing AIDS was 64/ μ l. She had typical lesions of Kaposi's sarcoma on oral mucosa and lower extremities, proved with histopathology, at the time of diagnosis. She immediately received Highly Active Antiretroviral Therapy (HAART) then. Despite a rise in her CD4 count to 134/ μ l after six months of HAART, her Kaposi's sarcoma lesions persisted, for which radiotherapy was instituted. She was irradiated using localized field radiation with a total dose of 30Gy for lower extremity lesions (2Gy/fraction for three weeks, five days a week), and 18Gy for oral mucosal lesions (2Gy/fraction for three weeks, three times a week). Shrinkage of both oral mucosa and extremity lesions was observed at the end of radiotherapy. However, new lesions that were different from lesions of Kaposi's sarcoma arose from the right foot one week after completing radiation treatment. These lesions became extensive within three months. The lesions were asymptomatic. Examination revealed

multiple skin colored polyps and nodules of narrow base with a smooth surface which were distributed on the dorsum and sole of the right foot (Figure 1,2). The lateral side was mainly affected. The left foot and the areas above the ankle were not involved. White blood cell count was 5,100/dl; hemoglobin level was 12.3gr/dl and platelet count was 220,000/dl. Her CD4 count was 181/ μ l. Renal and liver function tests were normal. X-ray showed no bone abnormality on the right foot. Incisional biopsy was taken from two separate nodules and histopathology showed a polypoid tumor with flattened hyperpigmented epidermis and areolar hypocellular dermis (Figure 3,4). The diagnosis of benign fibroepithelial tumor was then made and the patient was sent to the surgery ward for excision of the lesions. To our knowledge, this is the first case of extensive localized fibroepithelial polyps associated with AIDS and radiotherapy.

Discussion

Fibroepithelial polyps, also named as soft warts, skin tags, or acrochordons, are common benign lesions composed of loose fibrous tissue, occurring mainly on the neck and major flexures as a small, soft, pedunculated protrusions¹. They can also occur



Figure 1. Skin-colored smooth-surfaced polyps on the dorsum of the foot of an AIDS patient treated with radiotherapy for Kaposi's sarcoma. Note the violaceous lesions of shrunken Kaposi's sarcoma that are different from the polyps.

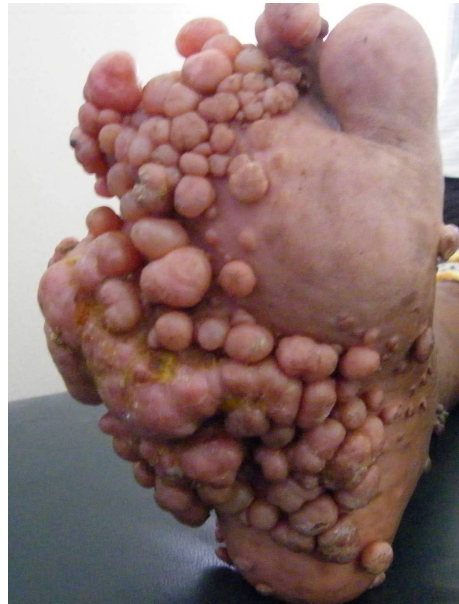


Figure 2. Extensive polyps on the sole of the same patient in Figure 1.

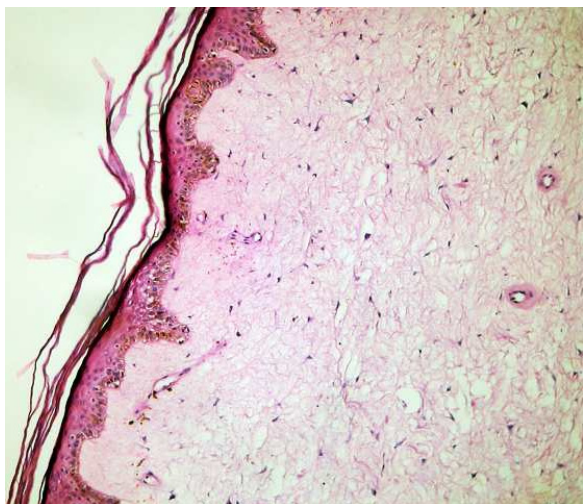


Figure 3. Hematoxyline-Eosine (HE) staining of the lesion showed a flattened epidermis and hypocellular dermis (10X).

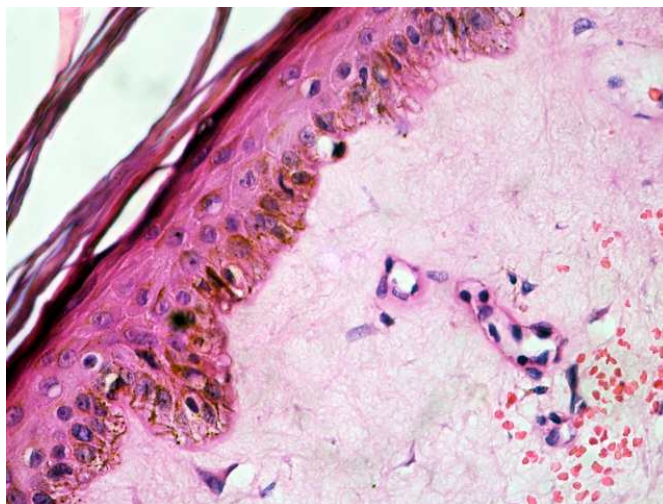


Figure 4. High power magnification of the polyps showed a hyperpigmented epidermis and loose areolar dermis (HE stain, 40X)

on the lower extremities² and their size could be very giant^{3,4}. Although the exact cause of fibroepithelial polyps is not known, their association with impaired carbohydrate metabolism has been mentioned⁵. Human papilloma virus infection has also been identified in 88% of skin tags in one series⁶. Soft fibroma-like lesions having histologic features of skin tags have also been mentioned in

patients with lymphedema and Kaposi's sarcoma⁷. The possibility of an infectious cause and immunosuppression in the pathogenesis of fibroepithelial polyps is supported by the recent review of immunosuppression related fibroproliferative polyps by Gleason and Vargas⁸. Our report substantiated the theory that immunosuppression is an important factor in the

pathogenesis of fibroepithelial polyps although further research is needed.

Acknowledgment

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