Unresolving / Progressive Skin Lesions in Cancer Patients: Be Aware of Carcinoma Cutis

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Abstract Cutaneous metastasis from prostate cancer is exceedingly rare. We present an unusual case of a 70-year-old male with prostate cancer who developed erythematous papulo-nodular lesion on lower abdominal wall, both groins and external genitalia. Biopsy from the cutaneous lesion showed metastatic adenocarcinoma cells in the dermis and subcutaneous tissue. Immunohistochemistry was positive for prostate specific antigen confirming cutaneous metastasis from prostate cancer. Recognition of such entity is important as it may be mistaken for other skin diseases.

Keywords Carcinoma Cutis · Cancer Prostate · Metastasis · Skin Lesion

A 70-year-old male presented with history of transurethral resection of prostate 2 years back for bothersome lower

urinary tract symptoms. At that time his serum prostate specific antigen (PSA) was 3.9 ng/ml while digital rectal examination showed normal consistency prostatomegaly. His ultrasound KUB showed normal upper tract while the size/weight of prostate was 43 g. The biopsy of resected specimen showed benign prostatic hyperplasia. Post-operatively, he developed urinary incontinence and after 3-months developed renal failure (serum creatinine - 7.5 mg%). Evaluation revealed bilateral gross hydronephrosis and low compliance, small capacity bladder on urodynamic study. He was managed by placement of bilateral percutaneous nephrostomies. His renal functions became normal and he was subjected to augmentation cystoplasty. Intra-operatively, the bladder wall was found to be diffusely thickened and biopsy showed metastasis from cancer prostate (CaP). Repeat evaluation showed that the PSA was 11.25 ng/ml and needle biopsy revealed adenocarcinoma prostate and Gleason grade was 4+2/10. Luteinizing hormone receptor agonist and bicalutamide were started. Few months later, he developed painless, multiple, erythematous papulo-nodular lesions over supra-pubic area which rapidly progressed to involve genitalia and lower abdomen including bilateral groins (Fig. 1). As the conservative management failed, these lesions were biopsied which showed adenocarcinoma cells in the dermis and subcutaneous tissue (Fig. 2). Immunohistochemistry was positive for PSA stain (Fig. 3) confirming carcinoma cutis.

Two to nine percent of the visceral malignancies cause cutaneous/subcutaneous metastases [1] and common causes

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Fig. 1 Photograph showing multiple, erythematous papulo-nodular lesions over lower abdomen, groins and genitalia

include malignancies of the breast, lung, kidneys, stomach, uterus, and colon. CaP is responsible for less than 1 % of all skin metastases [2].

Skin metastasis of CaP is associated with poor prognosis. The lower abdomen, genitalia and thighs are most often involved [3]. These lesions can be papule or nodule, sclerodermoid, may ulcerate, may have zosteriform distribution or mimic pyoderma. Surgical excision may be done for limited lesions; chemotherapy could be sufficiently palliative. Cur-

Fig. 2 Microphotograph showing dermis infiltrated by proliferating atypical round to cuboidal epithelial cells, lying in random groups as well as forming acini at places, having moderate amount of cytoplasm, hyperchromatic nuclei and prominent nucleoli. Underlying fibro fatty tissue is also infiltrated by these atypical cells. (H&E stain, 100 X magnifications)

Fig. 3 Microphotograph showing presence of adenocarcinoma cells [Arrow] positive for prostate specific antigen in dermis and underlying fibro fatty tissue (IHC; PSA stain, 400X magnifications)

rently, there is no data on the effectiveness of various treatment modalities [4, 5]. This patient, with an unusual clinical course refused further treatment and was lost to follow-up.

A high index of suspicion is recommended when unresolved progressive skin lesions are faced in cancer patients. Recognition of this entity (carcinoma cutis) is important as it may be mistaken for other skin diseases.

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Conflicts of Interest None

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