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Case Report

Primary cutaneous mucinous carcinoma of axilla: a case report with review of literature

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ABSTRACT

Primary cutaneous mucinous carcinoma is a low grade tumour of the sweat gland rarely occurring in middle aged men, more commonly in the sixth decade. When seen in a younger age group, the tumour tends to be more aggressive with potential for metastasis. Clinical presentation is usually a hard nodular well defined painless lesion confined to skin and subcutaneous tissue, commonly seen in head and neck region. Histopathological examination of the specimen shows cells with myxoid and mucinous material, confirmed by immunohistochemistry showing positive for estrogens and progesterone receptor and cytokeratin 7, is diagnostic. Surgery is the treatment of choice, wide local excision with margin of 1 cm as this tumor is resistant to radiotherapy and chemotherapy. Its tendency for late recurrences and rare metastasis, adds to the good prognosis. With rare chances of distant metastasis, prognosis remains good but local recurrences are not uncommon after excision.

Keywords: Mucinous carcinoma of skin, Primary cutaneous mucinous carcinoma, Axilla

INTRODUCTION

Primary cutaneous mucinuos carcinoma is a rarity in clinical practice arising from sweat gland (eccrine origin), first described by Lennox et al in 1952 and further reviewed formally by Mendoza and Helwing in 1971.[1] It presents mostly as a slow-growing, painless tumour in middle age men, usually well-defined and localised to the skin and subcutaneous plane commonly found in the head and neck region.[2] Generally presents as a single hard swelling with a smooth surface, sometimes ulcerated or crusted. With rare chances of distant metastasis, prognosis remains good but local recurrences are not uncommon after excision. Current report presents a case of primary cutaneous mucinous carcinoma in the axilla.

CASE REPORT

Current study is an observational study presented as a case report with review of literature. A 60 year old Indian man presented to the surgical out-patient department of our hospital with a nodule in the right axilla. Apparently, the swelling had been present since many years gradually increasing in size. There were no other complaints. On examination, 3x2 cm swelling in the right axilla in the subcutaneous plane, hard in consistency, mobile, well defined with smooth surface and a nodule at the summit. Fine needle aspiration cytology was done which revealed mucinous carcinoma either metastatic or primary leaving the diagnosis unclear. A thorough workup was done to see for any other metastasis or primary lesion elsewhere.

Bilateral breast examination was unremarkable. There was no axillary lymph node enlargement. Indirect laryngoscopy and oral cavity examination was normal. Chest CT scan was done which revealed a non-enhancing sub-pleural nodule in apico-posterior segment of left upper lobe 8 mm in size. This was followed by a bronchial lavage which was sent for cytological analysis. It revealed inflammatory reaction, with no evidence of malignancy. No other evidence of malignancy or metastasis was detected.

Patient was subjected to undergo a wide local excision of the axillary nodule under local anaesthesia. Histopathology confirmed the diagnosis as primary cutaneous mucinous carcinoma. Patient has been following up since 1 year with no evidence of local recurrence or further metastasis.

Figure 1: Axillary lesion.

Figure 2: Excised lesion.

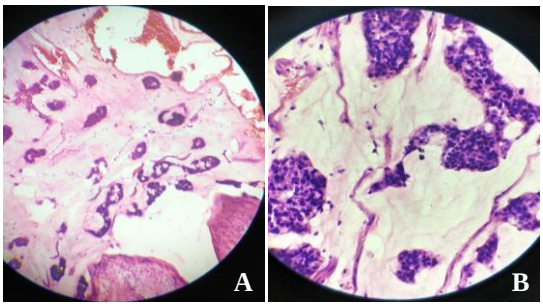

Figure 3: Histopathological picture, sections showing cells with myxoid and mucinous material showing hyperchromatic cells arranged A) singly and B) in clusters suggestive of primary mucinous carcinoma of skin.

DISCUSSION

Primary cutaneous mucinous carcinoma is a low grade tumour of the sweat gland with late recurrences and rare metastasis, hence a good prognosis overall. It occurs commonly in the head and neck region, commonly in the eyelid (41%), scalp (17%), face (14%), and axilla (9%) and rarely in vulva and chest/abdomen, ear, extremities and groin.[4] It is a rare neoplasm occurring in the elderly age group in the sixth decade of life more in males. When seen in a younger age group, the tumour tends to be more aggressive with potential for metastasis, the reason for which is still unclear.[5] Recurrences occur due to incomplete resection, and are resistant to radiation and/or chemotherapy.[3] Asians seem to have a better prognosis compared to whites.

Diagnosis is accomplished by histopathology after wide local excision with 1 cm margin. It is important to differentiate it from mammary mucinous carcinoma, especially when it occurs over the chest wall and axilla. It is also important to differentiate the primary lesion form metastasis to skin. The treatment and prognosis of both vary drastically from primary cutaneous mucinous carcinoma.

Metastasis to skin can occur from mucinous carcinoma of breast, gastrointestinal tract, prostate, lung and ovary. Immunohistochemistry shows oestrogen and progesterone receptor positivity and cytokeratin-7 positive whereas negative for TTF1 and CK20.[6] Local recurrences are seen in lesion greater than 1.5 cm in size.[5]

CONCLUSION

Primary cutaneous mucinous carcinoma is a rare neoplasm occurring in elderly males with a good prognosis, which require wide local excision. Diagnosis is established on histopathology. There is still scope for immunohistochemistry to characterise the lesion further.

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