

ABDOMINAL WALL CUTANEOUS SQUAMOUS CELL CARCINOMA: RARE ENTITY DESCRIPTION AND REVIEW OF LITERATURE

Oncology

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ABSTRACT

Squamous cell carcinoma (SCC) of skin is the second most common Non melanomatous skin malignancy. Ultraviolet rays (UVR) exposure is a strong risk factor, the reason for incidence of lesions in chronic sun exposed areas. SCC involving abdominal wall is a rare entity. We present a case of cutaneous SCC of abdominal wall without any history of chronic sun exposure, exposure to non solar risk factors or premalignant skin lesions like actinic keratosis.

KEYWORDS

INTRODUCTION

Squamous cell carcinoma (SCC) of skin is the second most common non melanomatous skin malignancy [1]. It arises from keratinocytes of the skin or mucous membrane. Ultraviolet rays (UVR) exposure is a strong risk factor, the reason for incidence of lesions in chronic sunlight exposed areas and cumulative sun exposure. Non solar risk factors are chemical exposure (herbicides, insecticides), arsenic, hydrocarbons, chronic thermal injury and scars, Ionising radiation and chronic immunosuppression. UVR causes DNA mutations in keratinocytes, inability to repair mutations makes them more susceptible to UVR effects. Incidence of cutaneous SCC on abdominal wall is very rare without any history of chronic sun exposure, exposure to non solar risk factors or premalignant skin lesions like actinic keratosis [2].

CASE DESCRIPTION

A 64 year gentlemen presented with complaints of ulcer over the left lower abdominal wall since 2 months. History of gradual increase in size of lesion from 2x 1 cm² to present size and was associated with dull aching pain. He has no history of chronic exposure to skin, exposure to chemicals or premalignant lesions, trauma. No history of burns. Physical examination showed 8 x 6 cm² irregular ulcerative lesion over the left lower abdomen extending in to left flank. No discharge, bleeding. No palpable inguinal group of lymph nodes, axillary nodes.

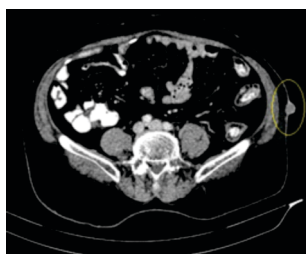


Fig 1. CECT Axial Image showing abdominal wall ulcerative lesion on left side (circle)

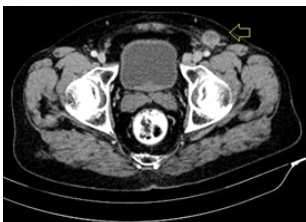


Fig 2. CECT Axial image showing inguinal lymph node on left inguinal region (arrow)

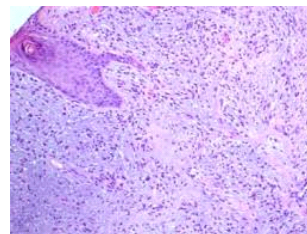


Fig 3. Histopathological image of cutaneous SCC of abdominal wall

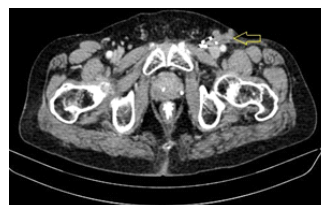


Fig 4. CECT Axial image showing Left inguinal lymph node on recurrence (Arrow)

MANAGEMENT

- CECT abdomen and pelvis showed 8x6cm² mm sized heterogeneously enhancing soft tissue density lesion is noted involving skin and subcutaneous plane left lateral abdominal wall. Few nodes are noted in left inguinal region and along bilateral external iliac vessels largest measures 20x21 mm in left inguinal region (Fig 1 and 2)
- Biopsy done from edge of lesion reported as poorly differentiated squamous cell carcinoma with evidence of nuclear atypia, hyperchromatin, keratin pearls (Fig 3).
- Patient underwent Wide Local excision of ulcerative lesion with 1 cm margin in to subcutaneous tissue. Margins confirmed by frozen section and defect were closed primarily. Modified Inguinal block dissection of ipsilateral side was done removing fibro-fatty and lymphatic tissues.
- Histo-pathological examination reported primary as well differentiated squamous cell carcinoma, skin of anterior abdominal wall. No evidence of lymphatic invasion, vascular invasion, perineural invasion. All cutaneous surgical resection margins are free of tumor. Base of resection (BOR) is 1.0cm away and free of tumor. Inguinal block dissection showed only 1 positive lymph node with extra nodal extension. Postoperatively patient received radiotherapy to inguinal group of lymph nodes (400 cGy / fraction of total 35 fractions) due to featured of high risk SCC and extra nodal extension of 1 lymph node.

RECURRENCE

- After post op radiotherapy, patient was on regular surveillance.
- He had nodal recurrence after 2 months of completion of radiotherapy.
- Physical examination showed 2x3 cm² lymph node in inguinal region on medial aspect of scar. Scar of excised primary was healthy without signs of recurrence.
- Fine needle aspiration (FNA) showed metastatic carcinoma.
- CECT abdomen and pelvis showed few nodes are noted in left inguinal region largest measures 16x14 mm in left inguinal region and no lymph nodes in pelvic group of lymph nodes (Fig 4).
- In view of recurrence within 2 months and high risk features in primary disease, Multidisciplinary team (MDT) decided for radical inguinal block dissection and ipsilateral pelvic lymph node dissection.
- Patient underwent laparoscopic left pelvic lymph node dissection and radical inguinal block dissection with Tensor fascia lata (TFL) flap reconstruction of defect area. Post operative course was uneventful.
- Patient was discharged without any complication and was on follow up.
- Histopathology reported as four out of four lymph nodes identified show metastatic squamous cell carcinoma, well differentiated with perinodal extension (PNE). All 10 lymph nodes identified are free of metastatic tumor (0/10).

DISCUSSION

Primary abdominal wall cutaneous SCC are very rare and few case reports are found in the literature. Lee et al. [3] reported first case of abdominal wall SCC in a 66 year old female with history of non-healing ulcer, reported in literature. Metastatic squamous cell carcinoma from other visceral organs like lung, cervix to abdominal wall is reported in literature, even though rare. This patient had no history of inducing agent, precancerous lesion, previous history of SCC or trauma or scars at local site. High risk features associated with this patient were large size (8x6 cm²), poorly defined borders, poorly differentiated SCC, short history of disease (rapidly growing), more than 6 mm thickness of the lesion [4]. Recurrence of nodal disease after surgery and radiotherapy denotes the poor prognostication of the disease. Due to lack of guidelines, decision of treatment should be individualised by extrapolating guidelines from other sites.

CONCLUSION

Abdominal wall cutaneous SCC are rare carcinomas reported very few worldwide. Treatment should be individualised for the patients depending on high/low risk features, prognostic factors, performance status and metastatic stage of patients.

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