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Case Report

A precancerous saree lesion: a rare occurrence

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ABSTRACT

Skin cancers are relatively uncommon malignancies; their incidence in India being less than 1% of all cancers. The incidence of malignancy in scar tissues is 0.1-2.5%. Squamous cell carcinoma of skin is second most common amelanotic malignancy next to basal cell carcinoma. The occurrence of this disease is noticed in various parts of the body but waist line skin is not a common site. Saree is a type of female costume and dhoti is a male costume which is unique to the Indian subcontinent. The persistent and long term wearing of this costume results in depigmentation and glazing of the skin, acanthosis, dysplasia, scar and ulceration and subsequent, but very slow, malignant changes. The exact mechanism of the malignant transformation is unknown, but recurrent trauma over a long period with consequent interference with the healing process is a possible explanation. We are presenting a rare case of left flank ulcero-proliferative growth in a 75 year old woman. Wide excision with primary skin closure was done. Histopathology showed pseudoepitheliomatous hyperplasia with marked dysplasia without microinvasion. It is a premalignant lesion. The case needs its reporting due to its rarity. Awareness of saree cancer among Indians is important to prevent malignant lesions at waistline. Multimodality management with surgery, chemotherapy and radiotherapy is ideal for good outcome.

Keywords: Saree cancer, Marjolin's ulcer, Squamous cell carcinoma, Cutaneous

INTRODUCTION

Clothing performs a range of social and cultural functions, such as individual, occupational and sexual differentiation, and social status. The dhoti and saree are the traditional ethnic wear in most parts of India. The dhoti is worn by men tightly around the waist with one of the shorter ends carried under the groin and tucked at the back. Saree is a traditional and popular attire of Indian women. It is a strip of unstitched cloth with four to nine yards of various fabric materials, which can be worn in different styles. It is draped around waist over inner skirt (petticoat) which is tightened by a thick cord. It has been suggested that cellular mutations are responsible for the neoplastic changes that occur in the body cells. The factors which complicate the pathogenesis of saree cancer is that women work, sleep and bathe with the saree firmly attached to the waist in the hot and humid climate of certain areas. The waist is often soiled with dust and sweat and it gets the least opportunity for a thorough cleaning. Chronic irritation in the waist leads to patches of depigmentation, glazing of the skin and acanthosis.[1,2] The constant friction by tight garments may progress to carcinoma. This cancer was named as Dhoti cancer or saree cancer in 1945 by Khanolkar and Suryabai.[1] We are presenting a rare case of premalignant ulcer in the waistline due to chronic irritation of the skin.

CASE REPORT

A 75 year old farmer woman from rural area was referred to our center (India) with chief complaints of itching and

non-healing ulcerative lesion at the site of petticoat knot at left waistline since last two years. Initially there was dry skin with occasional pruritis. Since the last 4 months she noticed a rapid growth with ulceration, pain and serosanguineous discharge. She gave a history of wearing tight saree since approximately 60 years. Home remedies and topical application of different ointments were tried. She was not suffering from diabetes mellitus, hypertension, cardiovascular disease and any other major illness.

Clinical examination revealed a non-healing ulcero-proliferative growth on left side of waistline measuring 8x5 cm with an ulcer of size 2.5x2 cm having everted edges, rolled up margins and serosanguineous discharge from the thick indurate ulcer bed (Figure 1). Surrounding skin was thick, atrophied and hypopigmented. On palpation it was firm, tender and not fixed to underlying structures. The bilateral groin had no palpable lymphadenopathy. Laboratory investigations including hematological and biochemical parameters were within normal range. Surgery was planned and wide excision with a 2 cm margin of the growth with primary closure was done (Figure 2 and 3).

The histopathology report suggested a pseudoepitheliomatous hyperplasia with marked dysplasia. No evidence of microinvasion (Figure 4).

Post-operative period was uneventful.

Figure 1: Ulceroproliferative growth over left waistline,

Figure 2: Excision of growth with primary closure.

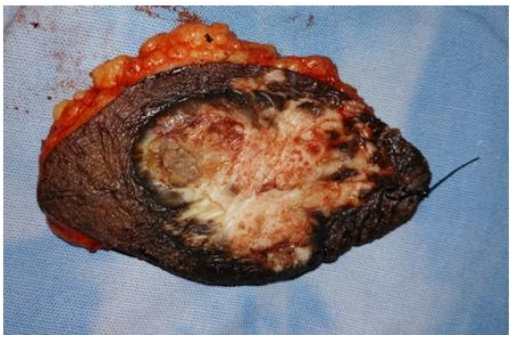

Figure 3: Specimen for histopathology.

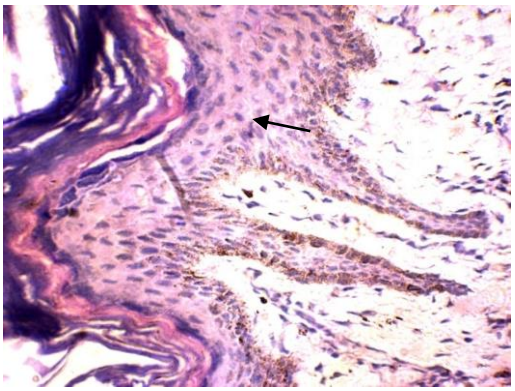

Figure 4A: Photomicrograph: Section showing pseudomatous hyperplasia (arrow) 40x magnification.

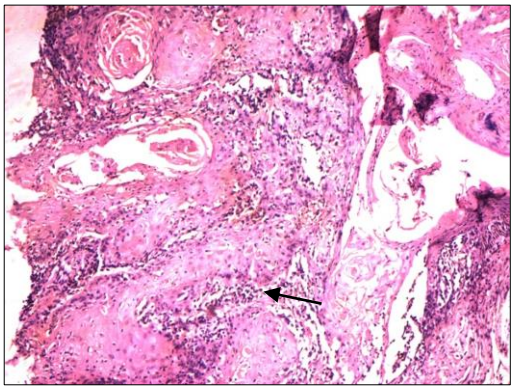

Figure 4B: Photomicrograph: Section showing marked dysplasia (arrow) 10x magnification.

DISCUSSION

The incidence of malignancy in scar tissues is 0.1-2.5%. The greatly hypopigmented and thickened scars are more likely to progress into malignant lesions. Khanolkar and Suryabai described a new type of skin cancer - 'dhoti cancer' in 1945.[1] Patil et al[3] reported a similar type of skin cancer in females which is known as 'saree cancer'. The malignant degeneration of a chronic wound which was described by Marjolin in 1828[4] is now synonymous with a variety of cancers which arise in any scar tissue or chronic ulcers. Usually, the ulcers are SCCs that occur at sites of previous burns, scars, sinuses, pressure ulcers,

trauma, sites of osteomyelitis, chronic friction (saree), chemical irritation, HPV infection and prolonged heat exposure (Kangri contact).[5]

The lesion usually starts as hypopigmented chronically irritated area of skin as dermatoses.

Later the atrophic skin becomes thick and appears as raised firm, flesh coloured papule or plaque and progresses to everted growth and ulcer. Atrophic dermatitis has been found to be more prone for developing carcinoma.[6]

It has been pointed out that every cutaneous scar which is subjected to continuous irritation has an increased potential for malignant degeneration.[7] Neuman et al[8] proposed that the traumatic displacement of a living epithelial tissue into the dermis may cause a foreign body response and lead to a deranged regenerative process, resulting in a carcinomatous change.

Some authors postulated that with chronic irritation and repeated damage, there is a continuous mitotic activity, as the epidermal cells attempt to resurface the open defect. This cycle of damage, irritation, and repair can lead to a malignant transformation.[9]

Castillo and Goldsmith[10] proposed that a depressed immunologic state which is produced by the surrounding scar tissue can predispose to malignant degeneration. The absence of lymphatic drainage from the scar allows a significant delay in the host immunologic recognition, and the antitumour immunologic response is poor.[11] The more recent theories have included genetic postulations which involve the Human Leukocyte Antigen (HLA) DR4 and mutations in the p53 and/or the FAS genes.[12,13]

This cancer is locally infiltrating and extensive metastasis at the time of diagnosis is uncommon.

A tumor of thickness 2 mm or less does not metastasize, 2.1-6 mm metastasize in 4% cases and more than 6mm present with metastasis in 16% cases.[14]

The radiologic investigation like CT scan, PET scan has limited role only to evaluate metastasis.

Wide local excision (with a surgical margin of at least 2 cm) together with skin grafting is considered as the appropriate treatment. Lymph node metastases appear later in cases of saree cancer in the inguinal and the axillary lymph nodes.[15] SCCs which develop on chronic skin lesions have a higher incidence of metastasis (9% to 36%) as compared to the carcinomas which arise in previously normal skin (1% to 10%).[16] Other non-surgical options include topical application of 5 fluorouracil and imatinib in low risk group. The third option is local radiotherapy but acceptable for early lesions only. Radiation may be an option in high risk group when surgery causes compromised cosmesis.[17]

Administration of chemotherapy before surgical management decreases tumor load. Addition of chemotherapy for radio sensitization of the tumor improves outcome in patients with advanced disease.

Prognosis of cutaneous squamous cell carcinoma depends on site and size of lesion, depth of invasion, histological characteristics and immune status of the patient.[18]

Follow up is very important to detect recurrence or persistence of the tumor and presence of new lesion.

CONCLUSION

The formation of a non-healing ulcer should alert the physician and the patient. A prompt tissue diagnosis and an early excision of the malignant lesion should be done to prevent disastrous consequences. For the prevention of saree cancer, wearing a loose saree and a petticoat is recommended as it reduces the pressure on the waist. Also, the use of a broader belt instead of a cord (nada) and the use of gown, pants or trousers at home are recommended. Regular inspection of the affected part is required to prevent it from transforming into a squamous cell carcinoma. Awareness about saree cancer among Indian women is important to prevent waistline dermatoses and their progression to malignant lesions. Clinicians should offer best possible treatment of such lesions with multimodality approach.

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