

# Cancer en Cuirasse Involving the Pubic and Vulval Skin Secondary to Carcinoma Rectum: A Case Report

### Imran Majid<sup>\*</sup> and Shabir Ahmad Bhat

CUTIS Institute of Dermatology, Srinagar, Jammu and Kahmir, India

\*Corresponding author: Imran Majid, CUTIS Institute of Dermatology, Srinagar, Jammu and Kahmir, India, Tel: + 91-9797107070; E-mail: cutisskin@gmail.com Received date: April 22, 2018; Accepted date: May 18, 2018; Published date: May 25, 2018

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## Abstract

Carcinoma en cuirasse is a specific clinic-morphological type of cutaneous metastasis that has been described with internal malignancies of the breast, lungs and gastrointestinal tract. We describe herein a case of carcinoma en cuirasses arising from an operated Carcinoma of rectum in a 55 year old female.

**Keywords:** Cuaneous metastasis; Carcinoma en cuirasse; Carcinoma rectum

# Introduction

Cutaneous metastasis from an internal malignancy is a relatively rare phenomenon and occurs usually in the late stages of the primary disease. Skin metastasis from internal malignancies occurs in three different ways, from lymphatic spread, from hematogenous spread and rarely from direct seeding of the skin [1]. The sites from where cutaneous metastases have been described include the breasts, lungs, gastrointestinal tract, melanoma, genitourinary tract and from head and neck malignancies [1]. Clinical presentation of cutaneous metastasis is varied and some peculiar morphological patterns have been described. Cancer en cuirasse is a specific morphological type of cutaneous metastasis where the skin is diffusely indurated and edematous as it is studded with carcinomatous lesions [2]. This condition is most commonly associated with carcinoma of breast and usually occurs as a local recurrence after mastectomy [2,3]. The condition usually denotes an advanced stage of the disease and carries a poor prognosis [2].

Among gastrointestinal malignancies, cutaneous metastasis has been described more commonly with carcinoma of stomach and colon. Cutaneous metastasis from carcinoma of rectum is a relatively rare phenomenon [4]. We describe herein a case of cancer en cuirasse arising from an operated carcinoma of rectum.

# **Case report**

A 55 year old female presented to our institute with the complaint of pruritus with edema of the pubic area of 1 month duration. The pruritus was gradual in onset and was severe enough to disturb the patient's sleep. With the onset of pruritus the patient had noticed some edema and thickening of the skin over the pubic area. This edema and thickening had worsened over the previous one month and had not responded to topical applications and oral antihistamines. The patient was a known case of adenocarcinoma rectum that had been operated 1-year back. The patient had undergone Abdominoperineal resection (APR) with colostomy and had also received 6 cycles of postoperative chemotherapy for the condition. The chemotherapy protocol included 5-fluorouracil with Oxaliplatin. The patient had been well after the

surgical procedure and chemotherapy protocol and had been on follow up of the treating oncologist. She had sought the opinion of the oncologist for her cutaneous problem and he had given her some anti fungal steroid combination cream but without any relief.



**Figure 1:** Diffuse edema of the pubic and vulval skin with prominent follicular openings looking like pseudovesicles

On examination there was a diffuse edema of the pubic and vulval skin with prominent follicular openings looking like pseudovesicles (Figure 1). There was no erythema or scaling present anywhere and the skin appendages looked normal. The skin had a shiny look but there was no dyspigmentation. On palpation a woody hard induration could be appreciated all over the pubis and vulva with sharp demarcation at the inguinal folds.

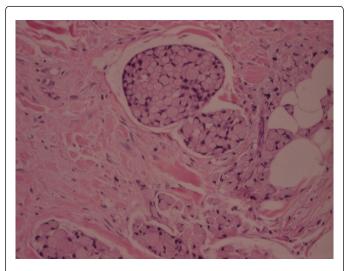
The regional inguinal lymph nodes were palpable but were not significantly enlarged in size. Abdominal examination did not reveal any clinically evident organomegaly.

With the history of an operated Carcinoma rectum with woody hard induration of the skin a possible diagnosis of cancer en cuirasse was made. The patient was advised a skin biopsy and CT Scan of the

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abdomen to look for other metastasis including lymphatic involvement.

Skin biopsy revealed infiltration of the whole skin with carcinomatous cells favoring the diagnosis of carcinoma en cuirasse (Figure 2). CT scan abdomen also showed the involvement of lymphatic system of the pelvic and lower abdominal region.



**Figure 2:** Skin biopsy, The clinical presentation with CT scan and skin biopsy findings confirmed the diagnosis of cancer en cuirasse.

# Discussion

Among different organ systems of the body skin is one of the rarest sites for metastatic deposition from internal malignancies. In a study conducted on more than 100,000 cases of internal malignancy, cutaneous involvement was documented in 77 patients only.3,4 Another study by Lookingbill et al on 7316 patients of internal malignancy reported cutaneous metastasis in 367 (5%) patients. In this study, cutaneous involvement from a primary colorectal tumor was seen in only 4 patients (0.05%) [4].

Cancer en cuirasse is a specific morphological type of cutaneous metastasis where the skin is diffusely studded with malignant deposits

leading to diffuse inducation and hardening of the skin. In fact, the term 'en cuirasse' literally means 'armor' or 'breast plate' signifying the peculiar clinical presentation of the disease. The term was first used by Alfred Velpeau in 1838 who described this entity for the first time [5].

The commonest malignancy associated with cancer en cuirasse is carcinoma of breast especially in females [2]. While cutaneous metastasis can occur in about 20% of advanced breast carcinoma patients, cancer en cuirasse accounts for about 2-3% of all such metastasis [6]. In addition to carcinoma of breast, cancer en cuirasse has been described in patients with carcinomas from stomach, penis, lung and colon. Cancer en cuirasse developing from a primary adenocarcinoma of rectum is a very rare phenomenon and has been reported only in a few isolated case reports [7].

The patient described herein was a diagnosed case of Adenocarcinoma rectum that had been operated and had received postoperative chemotherapy as well. She had been in remission for almost 1-year after the surgery and had no evidence of a local or distant recurrence over this follow up period. That was the reason why the oncologist could not think about a possible diagnosis of a cutaneous metastasis once the patient had presented to him.

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