

Case report

Cutaneous lymphangitic carcinomatosis: A rare metastasis from cervical cancer

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ABSTRACT

Skin metastases are a rare event in patients with cervical cancer. One form of such metastasis is carcinomatous lymphangitis, which is a rare presentation of skin metastases. Here we report a woman with cervical cancer diagnosed cutaneous lymphangitic carcinomatosis.

1. Introduction

Cervical cancer is the most common gynecologic malignancy in developing countries and is the leading cause of gynecological cancer death, with approximately 275,000 deaths in 2008 each year (Ferlay et al., 2010). The most common metastatic sites in descending order are lung, bone and liver (Berek and Hacker, 2000; Johansson et al., 1976). Skin metastases are a rare event in patients with cervical cancer. The incidence of such event is approximately 0.1 to 2% (Brady et al., 1977; Imachi et al., 1993). There are three patterns of metastatic skin lesions: nodules, plaques, and inflammatory telangiectasias (Imachi et al., 1993).

The most common sites of metastases to the skin include the abdominal wall, vulva, and anterior thoracic wall (Hayes and Berry, 1992).

Carcinomatous lymphangitis its another type of metastasis which can occur in a number of malignancies, including breast cancer, lung, colon, stomach, pancreas and prostate. It's an unusual form of metastasis from cervical cancer and with only a few cases reported in the literature, documenting carcinomatous lymphangitis dissemination to the lung and to the skin (Hayes and Berry, 1992; Palaia et al., 2002), the last one also called cutaneous lymphangitis carcinomatosis its extremely rare with only two previous cases reported in the literature secondary to cervical carcinoma (Table 1). Here we report a case of a woman with cervical cancer diagnosed cutaneous lymphangitic

carcinomatosis.

2. Case

A 41-year-old woman who was diagnosed with a FIGO stage IIIB cervical adenocarcinoma in November 2004. On physical exam the patient was noted to have a 5 cm lesion in the cervix with invasion of the anterior vaginal wall and left parametrial invasion. Abdominal CT showed no evidence of metastatic disease. The patient underwent treatment in the form of external beam radiation therapy to the pelvis with a total dose of 5040 Gy in 2 field technique for 28 days, followed by HDR brachytherapy. The patient also received six cycles of weekly cisplatin. At the end of the treatment a complete response was observed in the patient.

The patient was well until September 2007 when she presented with a retroperitoneal relapse diagnosed by PET-CT and managed with six cycles of chemotherapy in another institution, with good clinical response and no symptoms. In September 2008, the patient presented with multiple skin lesions on the vulva, left inguinal region and left leg. The patient was noted to have erythematous plaques, areas of hyperkeratosis and ulceration (Figs. 1 & 2), associated with pruritus and marked lymphedema in the left leg. A biopsy of the vulvar lesion was performed and confirmed a carcinomatous lymphangitis (Fig. 3) secondary to metastases from cervical adenocarcinoma.

The patient was hospitalized because of her poor performance status

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Table 1
Vulva biopsy confirming a carcinomatous lymphangitis.

Author	Year	Histological type	FIGO stage	Quimio-therapy	Radio-therapy	Surgery	Time between diagnosis and CLC ^a development	Diagnosis	Treatment of CLC	Survival after CLC diagnosis
Hayes	1992	squamous	IIB	-	External and intracavitary	-	Four years	Skin biopsy	none	One month
Palaia	2002	squamous	IIB	Cisplatin	-	type IV radical hysterectomy	Five years	Skin biopsy	10 cycles every 21–25 days of Paclitaxel 175 mg/m ²	symptom-free interval of 9 months until isolated lung metastases with pleural effusion were detected at CT scan.
This case	2013	squamous	IIB	Cisplatin	External and brachytherapy	-	Four years	Skin biopsy	Palliative	One month

^a CLC: cutaneous lymphangitis carcinomatosis.



Fig. 1. Skin metastasis in leg.



Fig. 2. Cutaneous metastasis in abdominal pelvic wall.

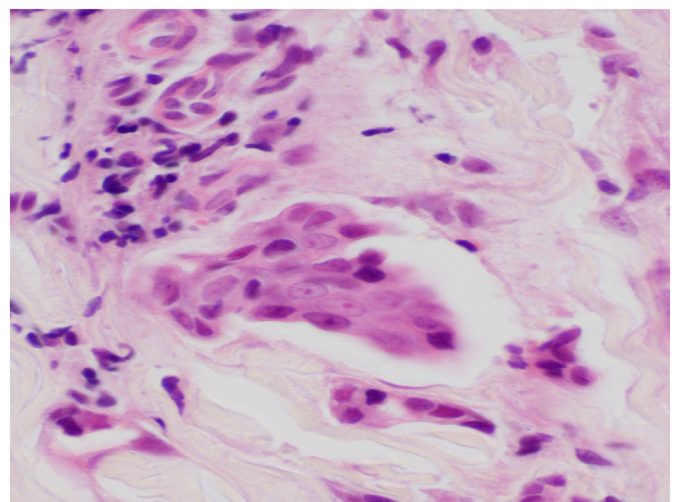


Fig. 3. Vulva biopsy confirming a carcinomatous lymphangitis.

and was treated with analgesics, piperacillin/tazobactam for secondary infection in skin areas and interdisciplinary management with palliative care, infectious diseases, and dermatology. The patient continued to deteriorate, with poor clinical response, bacteremia development, sepsis and subsequently died in October 2008.

3. Discussion

Skin metastasis of cervical cancer is a rare entity, more often seen with adenocarcinoma with a reported incidence of 0.5 to 5%, and undifferentiated carcinoma with 20%, whereas squamous cell carcinoma rarely does with an incidence of approximately 0.93% (Imachi et al., 1993); Imachi et al. evaluated a total of 1190 patients with cervical cancer and found an incidence of skin metastases of 0.8% in stage I, 1.2% in stage II, and 4.8% in stage III and IV, for an overall incidence of 1.3%, (Imachi et al., 1993).

It has been thought these metastases are the result of retrograde dissemination of the tumor secondary to lymphatic obstruction. Carcinomatous lymphangitis has been reported only in two previous cases (Hayes and Berry, 1992) (Palaia et al., 2002), showing this very unusual dissemination pattern.

Most patients with skin metastases present with a single lesion, however in this case there was multiple areas of skin lesions with coalescent erythematous plaques, areas of hiperqueratosis and ulceration.

In this case the carcinomatous lymphangitis in skin developed four years after having radiotherapy. One explanation would be by retrograde lymphatic flow leading to skin of metastasis, (Zeidman, 1959), which could explain the unusual sites of metastasis in this case.

The management of skin metastases in patients with cervical cancer depends on the mode of presentation. In other words, if the patient has an isolated recurrence, such lesion can be managed by local resection (Deka et al., 2010),

In this case where the patient had multiple skin lesions secondary to cutaneous lymphangitic carcinomatosis, given the limited data on the literature we cannot make a recommendation, however palliative chemotherapy with paclitaxel (175 mg/m^2) as described in the case by

Palaia et al. (Palaia et al., 2002) the patient experienced a complete remission with a disease-free interval of 9 months. Unfortunately in our case the patient's was admitted to our institution with a severely advanced and sobreinfectado disease, where we were able to offer only palliative treatment and antibiotics to control the infected skin areas. This represents the third report of cervical cancer relapsed as a skin carcinomatous lymphangitis.

Conflict of interests statement

All authors included in this article have not conflict of interests.

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