

## Cutaneous Metastasis in a Patient of Metastatic Adenocarcinoma of Ovary: A Case Report

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**Abstract:** Cutaneous metastasis from ovarian carcinoma is relatively uncommon in clinical practice. We report a case of 68 year old woman who presented to us with vegetative crusted plaques over abdomen and perineal region. Histopathological examination confirmed the diagnosis of metastasis of an ovarian carcinoma.

**Keywords:** Carcinoma, metastasis, chemotherapy

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### I. Introduction

Cutaneous metastasis is an uncommon manifestation of internal malignancy. The rate of cutaneous metastasis in ovarian cancer is 3.5% and median time of survival after appearance of cutaneous metastatic lesions is 4 months.<sup>1</sup> A wide morphologic spectrum of clinical appearances has been described in cutaneous metastasis. This variable clinical morphology included nodules, papules, plaques, tumours and ulcers.<sup>2</sup> We report a case of 68 year female with primary ovarian adenocarcinoma presenting with cutaneous metastasis to her lower abdomen and perineal region masquerading pemphigus vegetans.

### II. Case Report

A 68 years old female presented with the complaints of brownish raised lesion over the lower abdomen for the last 2 months duration. Patient was a known case of metastatic adenocarcinoma for the last 5 years. Patient was apparently well 2 months back when she developed fluid filled lesions over lower abdomen and genital region which spontaneously ruptured in 1-2 days to form raw area followed by formation of brownish crust over it. There was history of pus discharge from the lesion along with associated pain & mild itching. History of associated fever was there. Patient had difficulty in urination and defecation due to genital lesions. No other mucosal involvement was there. History of decreased appetite and non-documented weight loss was present.

Patient was a diagnosed case of metastatic adenocarcinoma (5 years back) with primary ovarian Carcinoma for which total abdominal hysterectomy with bilateral salpingo-oophorectomy was done and she was given 6 cycles of Chemotherapy (cyclophosphamide, adriamycin, cisplatin).

On examination, over the lower abdomen and perineal region, there was a single, ill defined, brownish plaque of size 15\*10 cm approx. with irregular margins, raw area and brownish crust over the surface (Figure-1). On palpation the plaque was indurated and tender along with the oozing of pus discharge. Rest of the examination was not remarkable. On investigations there was mild anemia, pus culture sensitivity showed presence of E-coli. Chest X-Ray PA view showed mild pleural effusion. Ultrasound abdomen and pelvic organs was normal. Skin histopathological examination showed biopsy suggestive of cutaneous metastasis of adenocarcinoma (Figure-2). Rest of the investigations were within the normal limits. Patient was given injectable antibiotics for secondary infection. First cycle of chemotherapy was started.

In view of the imaging and constellation of clinical features, the final diagnosis was metastatic adenocarcinoma with cutaneous metastasis with primary ovarian carcinoma. The patient was referred to department of oncology for further management and later on she was lost to follow up. The differential diagnosis of pemphigus vegetans was kept however histopathology ruled out the same.

### III. Discussion

Clinically, skin metastasis vary considerably, but its recognition is important because they can be the first clinical manifestation of a still occult neoplasm. Spread of a primary tumour to the skin typically occurs late in the disease course but may be the presenting sign of underlying cancer. Cutaneous metastasis from an ovarian

tumour is a relatively unusual presentation in clinical practice. Distant metastatic deposit to skin is uncommon compared with organs such as liver, lungs, bones.

The overall incidence of cutaneous metastasis from visceral neoplasia is 5.3%. Breast cancer has the highest incidence of cutaneous metastasis (24%), whereas lung, colorectal, renal, ovarian, and bladder cancers all have rates between 3.4% and 4.0%. The most common site for cutaneous metastasis from visceral malignancies to occur is the chest, comprising 28.4% of the total, followed by the abdomen (20.2%), extremities (12%), neck (11%), back (11%), scalp (7%), pelvis (6%) and face (5%). These lesions are often described as flesh-coloured, pink/violaceous, cutaneous or subcutaneous nodules, although reports of non-nodular metastasis exist.<sup>2</sup> The most common sites of distant metastasis for ovarian cancer are the pleura, liver, bone, lung and lymph nodes, whereas cutaneous metastasis are rare.<sup>3,4</sup> Median survival after diagnosis of skin metastasis from ovarian cancer is 4 months.<sup>1</sup>

Cutaneous metastatic ovarian carcinoma most commonly presents as solitary, grouped papules and/or nodules on the trunk.<sup>5</sup> On the contrary, our patient had vegetative plaques making it a rare presentation of cutaneous metastasis. Reports indicate that most metastatic skin lesions occur in skin adjacent to the primary ovarian cancer, including the abdominal wall.<sup>36</sup>

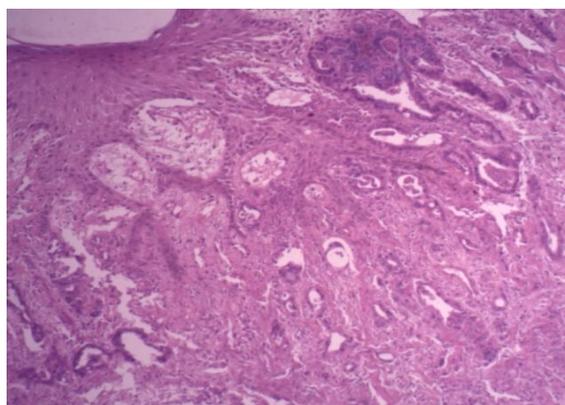
Other forms of cutaneous metastatic ovarian carcinoma include herpetiform-pattern metastatic nodules, erythema annulare, cutaneous metastasis with calcospherites, scalp nodules, subungual metastasis, skin nodules, subcutaneous metastasis, and lymphangiomas carcinomatosa of the skin. Paraneoplastic associations of ovarian carcinoma include acanthosis nigricans, Raynaud's phenomenon, scleroderma, dermatomyositis and palmar fasciitis with polyarthritis. Both cutaneous paraneoplastic effects and metastatic presentations portend a poor prognosis in ovarian carcinoma.<sup>5</sup> Our case is thus an example of the many unusual presentations of cutaneous metastatic ovarian cancer.

#### IV. Conclusion

Cutaneous metastasis as a presenting feature of an internal malignancy is uncommon. Their diagnosis by histopathology is useful in identifying obscure lesions that are not commonly encountered.



**FIGURE-1:** 68 years old female with ill defined, brownish plaque with irregular margins, raw area and brownish crust over the surface.



**Figure-2:** HPE (10X) showing metastatic deposits from adenocarcinoma.

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