Cutaneous metastases presenting as genital ulcer disease

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Abstract
Cutaneous metastasis from an internal organ malignancy is rare and as, the presenting sign of malignancy is an uncommon phenomenon. Their presence, signals a poor prognosis. We report a case of 50-year-old female who was referred to sexually transmitted diseases - out patient department, with complaints of multiple genital ulcers to rule out sexually transmitted infections. After thorough evaluation, she was found to be a case of carcinoma cervix with metastatic squamous cell carcinomatous deposits on external genitalia. This case was unique because of relatively asymptomatic nature of internal malignancy and atypical presentation of carcinoma cervix as cutaneous metastasis.

Key words: Cervical cancer, cutaneous metastasis, genital ulcer

INTRODUCTION
Skin is a relatively uncommon site for distant metastatic deposits from an internal organ malignancy compared with organs such as liver, lung, and bones. The incidence of cutaneous metastasis from internal malignancy ranges from 0.7% to 9%. The overall incidence is 5.3%.[1] Carcinoma of the uterine cervix is the second common malignancy in women and it metastasize to lung, bones, and liver commonly. Cervical cancer metastating to the skin is seen in <2% of patients. In a case report, analyzing 46 cases of cutaneous metastasis of cervical cancer, vulvar metastasis is reported in 19% of cases.[2] On the other hand, 8% of vulvar tumors are metastatic. The most common primary site for vulvar metastasis is the cervix followed by the endometrium, kidney, and urethra.[3]

CASE REPORT
A 50-year-old female, housemaid by occupation presented, with complaints of genital ulcers 2 months duration. Genital lesions started as a painless, pea sized nodule, increased in size and then ulcerated. Patient gave a history of purulent discharge and bleeding from the ulcer. Painless, intermittent spotting per vaginum was ignored by the patient for the last 6 months. There was no history of abnormal per vaginal discharge. She was a married woman with two children with no premarital or extramarital contact history. She was widowed and living alone for the last 1 year. On general examination, patient was well-built and nourished, anemic. A Single, firm, mobile node of size 0.5 cm × 0.5 cm was palpable in left supraclavicular fossa. Systemic examination was normal. On local examination, there was edema of external genitalia, upper thighs and lower abdominal wall. Urethral meatus was normal. Multiple genital ulcers of average size 1 cm × 1 cm was seen over left labium majus [Figure 1]. A large, indurated, friable ulcer of size 3 cm × 2 cm with foul smelling, purulent discharge that bleeds on touch was seen over the left side of mons pubis. A sinus was seen on the left side of perineum.
Inguinal lymphnodes could not be examined because of edema. On per vaginal examination, a 3 cm × 2 cm friable growth was seen over the ectocervix at 10-o’clock position, uterus was atrophic, multiple nodular lesions were palpable on the upper part of left lateral vaginal wall. On per rectal examination, multiple small firm to hard nodules were felt over the anterior rectal wall. Tissue smear for Donovan bodies, Tzanck smear and dark ground examination were negative. Pus for culture and sensitivity showed no growth. Routine blood investigations were normal except hemoglobin which was 8.8g%. Serological tests for syphilis, human immunodeficiency virus and hepatitis B surface antigen were non-reactive. Ultrasonography of the abdomen revealed a mass in the cervix. Computed tomography scan of the abdomen revealed a mass in the cervix probably malignant with extension into the parametrium; inguinal lymphnode enlargement and left sided hydro uretronephrosis. X-ray chest was normal. HPE [HistoPathological Examination] of Incisional biopsy specimen from the genital ulcer revealed well differentiated metastatic squamous cell carcinomatous deposits [Figure 2]. Fine needle aspiration cytology of left supraclavicular node showed metastatic squamous cell carcinomatous deposits. Histopathological examination of cervical biopsy revealed well differentiated squamous cell carcinoma. A final diagnosis of carcinoma cervix stage IV B was made by the radiotherapist and palliative treatment was planned.

DISCUSSION

Cutaneous metastasis of visceral malignancy is a relatively uncommon manifestation. To be, a presenting sign of underlying malignancy is still uncommon. The most common primary tumor metastasing to the skin is breast cancer, followed by malignancies of lung, colon, upper aerodigestive tract, stomach, uterus, and kidney in order of frequency, excluding the in-transit metastasis of melanoma.

Cutaneous metastasis tends to occur near the primary neoplasm. The common site being anterior chest wall followed by anterior abdominal wall. Other involved sites reported are scalp, extremities, back, incisional sites, and pelvis. In carcinoma cervix, abdomen is the most common site of skin metastasis, followed by the chest and vulva.

They generally present as solitary or multiple, painless, firm to hard nodules which may be skin colored, blue brown or reddish purple and may ulcerate. Presentation of solitary nodule is more common than multiple nodules. Other morphological forms are plaques, diffuse inflammatory rash and alopecia neoplastica. Scar infiltration and carcinoma erysipelatoides were commonly seen in other malignancies especially breast carcinoma. The mode of metastasis to skin from the primary tumor are (1) vascular or lymphatic embolization, (2) contiguos spread, and (3) direct implantation during surgical procedures.

The interval between diagnosis of CA cervix and skin metastasis is around 0-69 months with a mean of 17 months. The frequency of cutaneous metastasis from cervical cancer depends upon the stage of the disease. In stage I, it is around 0.8%, stages II and III 1.2%; and 4.8% in stage IV. The propensity of cutaneous metastasis also depends on the type of tumor. Higher chances are seen with
adenocarcinoma; undifferentiated carcinoma and rarely in squamous cell carcinoma,[10] but in contrast Agarwal et al. reported higher chances in squamous cell carcinoma of the cervix.[2]

Treatment of skin metastases is usually palliative, using radiation, chemotherapy and surgery, alone or in combination. They generally signal a poor prognosis.

CONCLUSION

Though carcinoma cervix is a common malignancy, cutaneous metastasis is reported in only <2% of cases, even in advanced stage of disease. Our patient presented with multiple genital ulcers for exclusion of sexually transmitted infections but was found to be a case of carcinoma cervix stage IV B. Unusually she presented with good general condition inspite of her advanced stage of disease and within 6 months of having clinical symptom of intermittent spotting per vaginum. Also, squamous cell carcinoma of cervix presenting as multiple and ulcerated nodules in vulva is very unusual. The multiple genital ulcers and the sinus in the perineum were most probably due to vascular or lymphatic embolization. In the phase of syndromic management, thorough clinical evaluation, with prompt and appropriate investigations should not be overlooked.

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