Case Report

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Carcinoma Cervix with Ulnar Mets: Unusual Case Report

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Abstract

Cervical cancer is the second most common gynecological malignancy in Indian women. It usually spreads locally or via regional lymphatic to retroperitoneal lymph nodes and hematogenous spread is rare. The occurrence of distant bony metastasis is a very rare event and only a few cases have been reported in literature. We present an unusual case of carcinoma cervix in a patient that presented with proximal ulna metastasis 7 months after treatment.

Keywords: Cervix; Bone Metastasis; Unusual Metastasis.

INTRODUCTION

Carcinoma cervix is the second most common malignancy in females in India[1] and usually presents in an advanced stage. It spreads locally and through lymphatic routes. Hematogenous spread is rare.[2] Metastasis to bone in carcinoma cervix is very rare and indicates advanced disease with poor prognosis.[3] The incidence of distant bone metastasis from cervical cancer ranges between 1.8% to 6.6%.[4] Bone metastasis in carcinoma cervix usually involves axial skeleton, pelvis, and ribs. Isolated metastases to appendicular skeleton are very rare. There are few reported case of isolated metastasis of tibia, fibula, humerus, calcaneum and metatarsal bones.[5] We report a case of a patient with carcinoma cervix with metastasis to right proximal ulna.

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CASE REPORT

A 60 year post menopausal women presented with complaints of white discharge per vaginum for 2 years and bleeding per vaginum for 5 months. On local examination, both lips of cervix were replaced by growth and cervical os dilated, growth extending to involve the posterior and lateral fornices and right parametrium indurated upto the lateral pelvic wall, rectal mucosa and vagina was free of tumor. Ultrasonography of whole abdomen was suggestive of bulky cervix with lesion measuring 2.4 x 1.8 cm in the anterior lip of the cervix. Histopathology from the growth revealed moderately differentiated squamous cell carcinoma. Metastatic workup did not show any lesion in the liver and the lungs. Thus, the diagnosis of Carcinoma Cervix (FIGO Stage IIIB) was made. Then, the patient was planned for

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Concurrent Chemoradiation. She was given radical radiotherapy to whole pelvis along with sequential boost to primary by external beam radiotherapy to a total dose of 64 Gy in 32 fractions along with 5 weekly cycles of concurrent chemotherapy with Cisplatin 40mg/m^2. Intracavitatory brachy therapy was attempted but was abandoned as cervical Os could not be negotiated due to dense fibrosis of external os. Patient attained loco-regional control and remained disease free for 7 months, when she presented with complaints of pain and tenderness over the lateral aspect of right forearm, distal to elbow joint associated with swelling and restricted range of motion. X-ray forearm was suggestive of pathological fracture of right proximal ulna. PET Scan revealed osteolytic lesion in right side of forearm bone ulna with SUV Max 8.0 and no other mets were present. Bone marrow smear revealed metastatic squamous cell carcinoma in right ulnar bone. She was given 1 cycle chemotherapy with high dose cisplatin 100 mg followed by palliative radiotherapy to the right ulna to a total dose of 30Gy in 10 fractions and along with a support of Zolendronic acid. After that she was planned for palliative chemotherapy with Paclitaxel and Carboplatin.

She received 2 cycles chemotherapy with Paclitaxel and Carboplatin, three weeks a part. Then, she defaulted for 2 months and again reported with complaints of swelling over the medial aspect of right arm and subcutaneous nodule over for earm. Fine needle cytology from the nodule was suggestive of metastatic squamous cell carcinoma. After this, she has received 2 more cycles of palliative chemotherapy with Paclitaxel and carboplatin and is doing well till now with disease that is 13 months after development of bony metastasis.

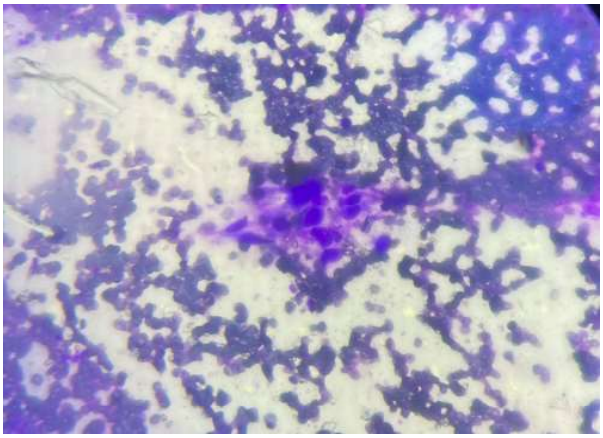


Fig. 1: Biopsy from cervical growth: Moderately differentiated squamous cell carcinoma.



Fig. 2: X-ray of right forearm showing osteolytic lesion with pathological fracture in right Ulna

DISCUSSION

Carcinoma cervix, being a preventable disease with available screening methods in early stage, still remains an important cause of morbidity and

mortality in developing countries such as India, where many patients present with advanced disease.

Incidence of distant bony metastasis in case of carcinoma cervix is 1.8 to 6.6%.[6] As per single institutional study by Bhandari *et al.* where after completion of treatment with standard protocol, 8.17% patients developed distant metastasis involving Lung was 48%, Liver was 28%, supra clavicular node was 8%, Bone was 4%, and unusual sites were 12%. The unusual sites were breast, paraspinal muscles and the duodenum. And the duration of development of distant metastases was within 8-18 months.[7] Distant metastasis occurs through many mechanisms, that includes extension to bone from pelvic soft tissue metastasis or the spine or both way, by batsons venous plexus or by systemic hematogenous route.[8] It is also observed that multiple mechanisms for metastasis may be involved.

Investigations for suspected bone metastasis should include X-ray, CT and bone scan. Recent study show that Positron emission tomography (PET/CT) and MRI can also be employed under such circumstances. Both MRI and PET are considered to be highly sensitive for detecting bone marrow lesions or osteolytic bone metastasis.[9] Because hematogenous bone metastasis is considered to start in bone marrow, and the majority of metastatic bone lesions in cervical cancer seem to be of osteolytic nature, both MRI imaging and PET may help in the detection of bone metastasis.



Fig. 3: PET CT Osteolytic lesion in right ulna with SUV max 8

Bone metastasis is associated with poor prognosis and treatment of such patients depends upon the response and performance status of the patient, the site of recurrence, or spread of metastatic disease. Local radiotherapy with external beam

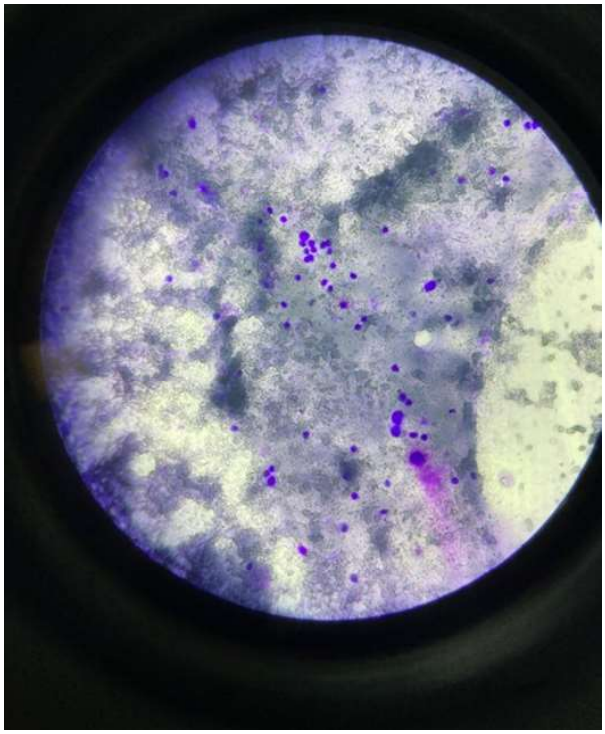


Fig. 4: Bone marrow smear: metastatic Squamous cell carcinoma

radiotherapy to the affected areain patients with metastatic disease is efficacious in relieving from pain. 60-70% of the patients are said to have relieved from pain through this therapy.[10]

In the present case, in order to control pain, the patient was delivered 30Gy over 10 fractions with 3Gy per fraction as against standard recommendation of single 8Gy over 1 fraction. The dose was very effective in controlling pain. Response to the dose took almost 4-6 weeks.[11] Then patient was planned for palliative chemotherapy with Paclitaxel 175mg/m^2 and carboplatin by AUC 5 and AUC 6 as her Karnofsky performance status was more than 80 and general condition was good. It is therefore very important to assess patients' performance status before arranging radiotherapy and chemotherapy.

There are only a few reported cases of isolated bone metastases in long bones in literature; namely an isolated recurrence in the femur and another isolated metastasis in fibula with carcinoma cervix. The patient under study has an isolated metastasis of right ulna. The median survival after bone metastasis in cervical cancer ranges between 7-10 months.[5] Our patient has survived 13 months till date after the diagnosis of bone metastasis and is still on treatment. The beneficial role of palliative radiotherapy in painful bone metastasis is proven. Our patient reported good pain relief with palliative

radiotherapy to right ulna and chemotherapy.

CONCLUSION

Bone metastasis in carcinoma cervix is rare. Palliative radiotherapy provides relief in pain and chemotherapy with palliative intent increases the survival of patient.

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