

CANCER CERVIX WITH SKIN METASTASIS - A CASE REPORT WITH REVIEW OF LITERATURE

Ayush Garg¹, Arvind Kumar Chauhan², Milan Jaiswal^{2*}, MS Kang^{3#}, Piyush Kumar⁴

Publication Info

Paper Submission Date
8th October 2016

Paper Acceptance Date
2nd November 2016

Paper Publication Date
December 2016

DOI
10.21761/jms.v1i2.7469

Abstract

Introduction: Carcinoma of the uterine cervix is seventh most common malignancy globally, however, it is the most common neoplasm among rural Indian women. Skin metastases is rare even in the late stages of the disease, the reported incidence ranges from 0.1 to 2%. Frequent sites of cutaneous metastasis are abdominal wall, vulva and anterior chest wall.

Case History: Fifty four years female of carcinoma cervix FIGO stage IIIB was radically treated with concurrent chemoradiation. On follow up, after 10 months, she presented with multiple subcutaneous nodules in the right forearm and arm along with lung metastasis. Fine needle aspiration cytology from the nodular lesions was positive for squamous cell carcinoma. She was given chemotherapy but expired within eight months.

Conclusion: Skin metastasis is considered as an ominous sign of widespread terminal disease with short survival.

Keywords: Cancer cervix, skin metastasis

INTRODUCTION

Cancer Cervix is the seventh most common malignancy, fourth most common among female and commonest malignancy among women in rural parts of India.¹ The majority of cases will metastasize as direct invasion of pelvic structures or distant hematogenous metastasis to the lungs, bone and liver.² Cutaneous metastasis is rarely reported, even in the late stages of disease, incidence being approximately 0.1–2%.³

Mostly these metastasis are associated with poor prognosis. Frequent sites of skin metastasis in decreasing order are abdominal wall, vulva and anterior chest wall², but some authors report unusual localizations such the hand, the face or the scalp^{4,5}. This manifestation has come to be widely regarded as a sign of disseminated, terminal disease³.

Out of the 329 patients of cancer cervix treated at our centre in last 9 years, this is the first case of skin relapse 10 months after radiotherapy with no evidence of associated locoregional failure, the reported incidence is 0.3%. To the best of our knowledge, only six cases of carcinoma cervix metastasizing to upper extremity have been reported all over the world and this is the first case reported to have cutaneous manifestation in the forearm region.⁵⁻⁷

CASE HISTORY

A 54 years old postmenopausal woman presented with complaints of bleeding and foul smelling discharge per vagina for 2 months. On clinical examination ulceroproliferative growth was seen involving both the cervical lips and all fornices extending to upper 1/3rd of vagina. The biopsy from growth revealed keratinizing squamous cell carcinoma. After complete haematological, biochemical and radiological work up, she was diagnosed as Carcinoma Cervix FIGO Stage IIIB. She was planned and delivered concurrent chemoradiation. Radiotherapy given was 50 Gy in 25 fractions in 5 weeks by four field box technique along with concurrent cisplatin 35 mg/m² on weekly basis. This was followed by HDR brachytherapy of 3 fractions of 7Gy each.

Patient tolerated the treatment well with mild reactions. On follow up, after ten months, she developed two subcutaneous nodules over right arm and forearm each. These nodules 2 cm x 2 cm in size, firm to hard, non tender and fixed subcutaneous lesion. FNAC from both nodular swellings showed squamous cell Carcinoma (Fig-1 & 2). PET-CT Scan whole body showed multiple metastatic lesions in both Lungs. Patient received 6 cycles of Palliative chemotherapy (Paclitaxel and Carboplatin). Skin

Junior Resident¹, Associate Professor², Senior Resident³, Professor⁴

Department of Radiotherapy, * Department of Pathology, Shri Ram Murti Smarak Institute of Medical Sciences, Bareilly, Uttar Pradesh

#Department of Radiotherapy, Guru Gobind Singh Medical College & Hospital, Faridkot, Punjab

Corresponding Email : piyukmagr@gmail.com

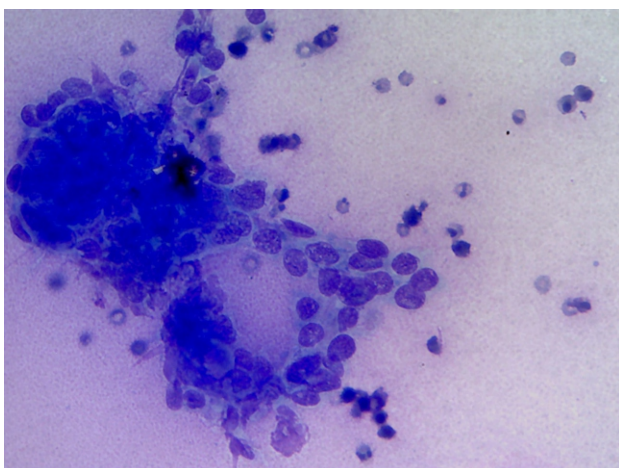


Fig-1: Loose cohesive clusters of epithelial cells with high nuclear cytoplasmic ratio, coarse chromatin and inconspicuous prominent nucleoli.

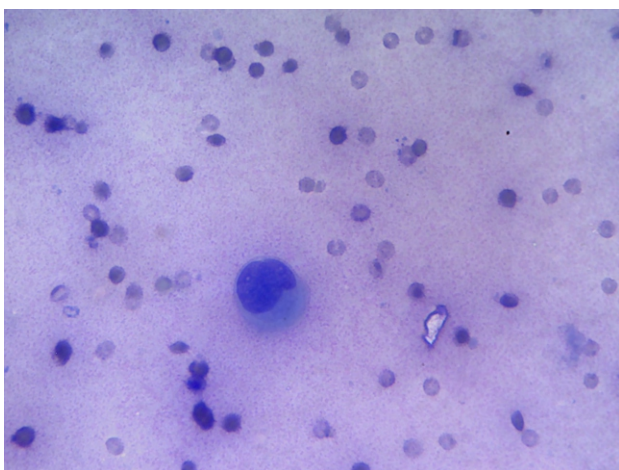


Fig-2: Malignant squamous epithelial cells with moderately abundant deep basophilic cytoplasm and disproportionately enlarged hyperchromatic nuclei with coarse chromatin- MGG (40X)

nodules were completely resolved but follow up imaging studies could not be done. Patient expired 8 months after the appearance of nodular lesion which was informed on phone.

DISCUSSION

Cutaneous metastasis in women are more likely to occur with primary malignancies of breast (60-69%), large intestine (9%), lung, kidney and ovary,⁸ from carcinoma cervix being an unusual entity. The usual distant metastasis from carcinoma cervix occurs to lung, liver, and bone².

The incidence reported for skin metastasis from cancer cervix is 0.1% to 1.3%.^{5,9} Imachi et al⁵ after reviewing 1190 patients with cancer of the cervix, including 15 of whom developed skin metastasis, observed that the incidence of skin metastasis was 0.8% in stage I, 1.2% in stage II, 1.2%

in stage III, and 4.8% in stage IV.

The frequent sites of cutaneous metastasis in decreasing order are abdominal wall, vulva and anterior chest wall.^{5,9,10} The manifestation in the upper extremities is still rarer. Only six cases have been reported in the upper extremity and after best literature search, our case is first to report in the forearm region.⁵⁻⁷

The suggested route of metastasis from cervix to the skin is considered to be lymphatic dissemination as tumour cells were found in the dilated lymphatics in skin lesions.³

Cutaneous metastasis usually presents in three main forms – nodule, plaque and inflammatory telangiectasia.⁵ FNAC may be useful in diagnosing nodular lesion, but biopsy is required for plaque and telangiectatic lesions.⁵ The histological types that most commonly give rise to cutaneous metastasis are adenocarcinoma and undifferentiated carcinoma, whereas squamous cell carcinoma is rare.^{5,11} In our case, the lesion was nodular and the FNAC revealed metastatic squamous cell carcinoma.

The explanation for stating this lesion as a metastatic one rather than a de novo lesion is occurrence of three primaries (cancer cervix, skin-arm and forearm) in a same patient is rare and hence the possibility of metastasis was considered. Further, primary squamous cell carcinoma of skin usually arises as a cutaneous ulcer or ulcero- proliferative growth and not as a nodular subcutaneous swelling.

The main modality of treatment for patients with cutaneous metastasis from cervical carcinoma has been extirpation followed by radiotherapy.⁵ But as our patient also has Lung metastasis we gave palliative chemotherapy (Paclitaxel + Carboplatin). She received 6 cycles of chemotherapy. To date, no effective treatment has been identified. Treatment is nearly always palliative, and consists of using radiation, chemotherapy, or surgery, either alone or in combination.^{12,13}

Cutaneous metastasis in carcinoma cervix is usually associated with preterminal advanced disease or recurrence at primary with multiple distant metastasis.³ In the case reported here, the cutaneous metastasis appeared along with distant metastasis to lungs with no local recurrence.

The prognosis associated with cutaneous metastasis of cervical carcinoma is poor. Imachi et al⁵ showed the mean interval between the diagnosis of cervical cancer and the diagnosis of cutaneous metastasis is 16.9 months (0–69 months), though Khurana et al has reported a case manifesting cutaneous lesion even after 14 years of curative treatment.¹⁰ In our case, the cutaneous lesions along with

lung metastasis appeared 10 months following radiotherapy with no locoregional recurrence.

The most important prognostic factor in such cases is the time interval between the initial diagnosis of the primary genital malignancy and the appearance of skin metastasis, whether metastasis is isolated or as a part of more widespread systemic recurrence. The earlier the metastasis occurs; the worse is prognosis for the patient. Nearly all patients die of the disease within two years, regardless of the treatment method.⁵ This is in consistent with our case where the time interval between primary and cutaneous metastasis was around two years presenting along with lung metastasis.⁵ Our patient expired of the disease 8 months after the appearance of the skin lesions, even though intensive combination chemotherapy was given.

CONCLUSION

Skin metastasis is considered as an ominous sign of widespread terminal disease with short interval of survival even after intensive treatment.

REFERENCES

1. Globocan 2012: Estimated Cancer Incidence, Mortality and Prevalence Worldwide in 2012.
2. Carlson V, Delclos L, Fletcher GH. Distant metastasis in squamous cell carcinoma of the uterine cervix. *Radiology* 1967;88:961-6
3. Malfetano JH. Skin metastasis from cervical cancer: A fatal event. *Gynecol Oncol* 1986;24:177-82
4. Elamurugan TP, Agrawal A, Dinesh R, Aravind R, Naskar D, Kate V, Reddy R, Elamurugan S, Siddaraju, Basu D, Parthasarathy. Palmar cutaneous metastasis from carcinoma cervix. *Indian J Dermatol Venereol Leprol* 2011;77:252
5. Imachi M, Tsukamoto N, Kinoshita S, Nakano H. Skin metastasis from carcinoma of uterine cervix. *Gynecol Oncol* 1993;48:349-54.
6. Benoulaid M, Elkacemi H, Bourhafour I, Khalil J, Elmajjaoui S, Khannoussi B, Kebdani T, Benjaafar N. Skin metastases of cervical cancer: two case reports and review of the literature. *Journal of Medical Case Reports* 2016;10:265
7. Cherian RM, Jeba J, Mukhopadhyay S, Backianathan S. Unusual sites of metastases of carcinoma cervix. *BMJ Case Reports* 2017
8. Brownstein MH, Helwig EB. Metastatic tumours of the skin. *Cancer* 1972;29:1298-1307
9. Brady LW, O'Neill EA, Farber SH. Unusual sites of metastasis. *Semin Oncol* 1977;4:59-64
10. Khurana R, Singh S. Isolated cutaneous metastasis to thigh from Cancer Cervix - 14 Years after curative radiotherapy. *Internet J Gynecol Obstet* 2009;11:1
11. Diwan AK, Khan S, Mahobia VK. Cutaneous metastases after radical chemoradiotherapy in carcinoma cervix: An unusual manifestation. *Inter J Medical Sci Res Prac* 2015;2(1):44-46
12. Behtash N, Mehrdad N, Shamshirsaz A, Hashemi R, Amouzegar HF. Umbilical metastasis in cervical cancer. *Arch Gynecol Obstet* 2008;278:489-91
13. Diehl LF, Hurwitz MA, Johnson SA, Butler WM, Taylor HG. Skin metastases confined to a field of previous irradiation; report of two cases and review of the literature. *Cancer*. 1984;53:1864-8