Cutaneous Metastasis of Cervical Cancer

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Abstract

**Aim:** Cervical cancer is a very common gynaecologic malignancy in India, while skin metastasis presenting as an initial sign of recurrent or persistent disease is extremely rare, reported incidence of 0.1-1.3%.

**Methods:** A retrospective analysis of case records of 504 patients, during a 3 year period (Feb 2006 – March 2009) was done

**Results:** The study showed that 71% women belonged to the postmenopausal age group, of which 72% were in inoperable Stage, 11.5% had recurrence and 28% showed metastasis. Five cases (1.6%) manifested with cutaneous metastasis. Two of them were already in stage IV, received palliative care, another case in stage III, had received external radiotherapy 8 months back. The remaining 2 cases were in stage II, one of whom underwent surgery followed by radiotherapy. The remaining last case had received radiotherapy alone.

Mean interval between diagnosis of primary and development of skin metastasis was 4 – 8 months. Biopsy proved metastatic squamous carcinoma in 4 cases as one patient refused intervention. Only three patients received teletherapy for cutaneous metastasis. The mean survival of all the 5 cases was less than 6 months.

**Conclusion:** This report supports the concept that skin metastasis is a late manifestation and an ominous sign for cervical cancer patients and also indicates uncontrolled or widespread metastasis of the disease with survival rates being less than 6 months.

**Keywords:** Cervical cancer, skin metastasis, postmenopausal cancer

Introduction

Although cervical cancer is a very common gynaecological malignancy in India, skin metastasis presenting as an initial sign of recurrent or persistent disease, however extremely rare, with a reported incidence of 0.1-1.3%.

Objectives

Therefore, the main objective was to correlate clinicopathological characteristics and prognosis of skin metastases in cervical cancer patients.

Methods

A retrospective analysis of case records of 504 patients during a 3 year period (Feb 2006-March 2009) was done. Relevant clinicopathological information, treatment of primary site and documentation of skin metastasis were noted. Survival time was calculated from the time of diagnosis of skin metastasis.

Results

Among 504 women with the diagnosis of carcinoma cervix postmenopausal and premenopausal women...
were 71% and 29% respectively, of them inoperable cases were 72%. Recurrence was noted in 11.5% and metastasis in 28%.

Cutaneous metastasis was manifested in 5 (1.60 %) cases as shown in Fig 1.

The details of these cases are given in table 1, and the characteristics of skin metastasis are shown in Table 2.

Histopathology of skin metastasis is shown in Fig 2-3.

**Fig 1. Incidence of Skin Metastasis**

![Incidence of Skin Metastasis](image)

**Fig 2. FNAC of metastatic lesion**

![FNAC of metastatic lesion](image)

**Fig 3. Histopathology of primary lesion**

![Histopathology of primary lesion](image)

**Table 1. Clinicopathological Characteristics of Patients with skin metastasis**

<table>
<thead>
<tr>
<th>Case</th>
<th>age (yr)</th>
<th>CaCx stage</th>
<th>Primary treatment</th>
<th>Histological grading squamous cell carcinoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>55</td>
<td>IVB</td>
<td>palliative care</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>65</td>
<td>IVA</td>
<td>palliative chemotherapy</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>45</td>
<td>IIA</td>
<td>Postop rt (ebt)</td>
<td>mod differentiated</td>
</tr>
<tr>
<td>4</td>
<td>30</td>
<td>IIIB</td>
<td>post op rt (ebt)</td>
<td>poorly differentiated</td>
</tr>
<tr>
<td>5</td>
<td>60</td>
<td>IIIB</td>
<td>post op rt (ebt)</td>
<td>mod differentiated</td>
</tr>
</tbody>
</table>

**Table 2. Characteristics of skin metastasis**

<table>
<thead>
<tr>
<th>Case</th>
<th>Site</th>
<th>Max diam (cm) of nodular lesion</th>
<th>Interval time (months)</th>
<th>Concomitant disease between diagnosis of primary &amp; skin metastasis</th>
<th>Treatment (a) &amp; Local rt</th>
<th>Survival period after Death after (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>vulva</td>
<td>2</td>
<td>4</td>
<td>liver mets</td>
<td>excisional biopsy</td>
<td>3.5</td>
</tr>
<tr>
<td>2</td>
<td>vulva</td>
<td>2</td>
<td>6</td>
<td>pelvic mets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Laparotomy scar epigastric, thigh, gluteal</td>
<td>3.5</td>
<td>7</td>
<td>pelvic mets</td>
<td>excisional biopsy</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>2</td>
<td>8</td>
<td>liver + pelvic mets</td>
<td>excisional biopsy</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Thigh submammary area, abdomen</td>
<td>2.5</td>
<td>6</td>
<td>liver + pelvic mets</td>
<td>Rt alone</td>
<td>6</td>
</tr>
</tbody>
</table>
Discussion

Key finding of the results are:-

- In our study, cutaneous metastasis was found in 1.6% (5 out of 504) of patients with cervical cancer, which is slightly less than the reported incidence of 0.1-1.3%.
- It can be compared with the incidence of 1.3% reported by Imachi et al.
- The mean interval between diagnosis of primary and development of skin metastasis was 4-8 months as majority of the patients presented at advanced stages.
- Cutaneous metastasis may be in the form of nodules, plaque or inflammatory telangetatic lesion. In all 5 cases it was nodular lesion.
- Cutaneous spread could be the result of retrograde tumor spread secondary to lymphatic obstruction.
- The most common histological type was adenocarcinoma.
- All five cases were given palliative treatment that consists of excision of the skin lesion followed by local radiotherapy and chemotherapy.
- The mean survival of all these 5 poor cases was less than 6 months, suggesting prognosis after skin metastasis.

Conclusion

Results of the present study supports the concept that skin metastasis is a late manifestation and an ominous sign for cervical cancer patients and also indicates uncontrolled or widespread metastasis of the disease.

References