Atypical metastases from squamous cell cancers

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Abstract
Relapse of squamous cell carcinomas usually occurs in a predictable pattern. We present two patients with rare metastases. The first developed peritoneal disease without evidence of intra-thoracic spread due to a laryngeal cancer. The second, a patient with a vulval squamous tumour was presented with distant disease following foot pain.

Keywords
Carcinoma; laryngeal carcinoma; vulval carcinoma; metastases.
Case reports

Patient 1

A 61-year-old man presented with one month of lymphadenopathy in the right side of his neck without systemic symptoms. He smoked 20 cigarettes a day and drank 40 units/week of alcohol.

A fine needle aspiration and biopsy confirmed Laryngeal squamous cell carcinoma. A subsequent CT scan demonstrated a pyriform fossa lesion with endoscopy showing that this extended into the right lingual tonsil. A radical neck dissection was performed and the patient went on to receive radiotherapy.

Three months following this treatment a 1 cm soft swelling on the right buccal mucosa was confirmed to be a recurrent squamous carcinoma. At this time, he was suffering with weight loss, nausea and on examination, had abdominal ascites with no lymphadenopathy. A chest X-ray was normal although a CT scan of his abdomen demonstrated peritoneal thickening. Paracentesis of this abdominal fluid revealed numerous squamous cell carcinoma cells (Fig. 1). He thereafter declined further treatment and died 4 months after initial diagnosis.

Patient 2

A 53-year-old woman presented with increasing abdominal distension. After preliminary investigations, she underwent laparotomy with bilateral salpingo-oophorectomy and omentectomy revealing a stage Ia grade 2 right ovarian papillary mucinous cystadenocarcinoma.

She received 6 cycles of carboplatin as surgical clearance was technically difficult and thought to have been incomplete. Her CA 125 normalised and 8 months later a squamous cell carcinoma of the vulva was diagnosed and completely excised. A bilateral lymph node
Fig. 1. Ascitic fluid (× 100) demonstrating numerous large squamous cells with hyperchromatic and pleomorphic nuclei. Smaller mesothelial cells, polymorphs and macrophages can also be seen.

dissection showed no lymph node involvement but excision margins were narrow.

Eighteen months later she noticed increasing pain in the right foot and a destructive lesion of the calcaneum was identified, biopsy of which showed squamous cell carcinoma consistent with the vulval lesion (see plain X-ray and bone scan in Fig. 2). The calcaneum was treated with 15 fractions of radiotherapy leading to symptomatic improvement. The bony disease has however progressed and further radiotherapy is being considered.

Discussion

Laryngeal squamous cell carcinoma spreads locally with the majority of distant metastases presenting in the lung. There are several documented cases of bone and cutaneous
Fig. 2. Plain radiograph of the right ankle (left) revealing almost complete lytic destruction with cortical erosion of the distal tibia, calcaneus and talus by tumour. Bone scan showing increased tracer uptake in the right foot bones, most obviously the calcaneum. The right tibia and possibly the mid-shaft of the left femur also appears to be affected.

secondarys, which were associated with a poor prognosis\textsuperscript{[1,2]}. Cancer of the vulva most frequently relapses locally and the most frequent sites of metastases are the vertebral column, particularly the lumbar spine followed by the pelvic bones\textsuperscript{[3]}. The staging and survival of these carcinomas are included in Tables 1 and 2.

The peritoneal and bone diseases presented here were associated with a poor prognosis, possibly reflecting a more aggressive phenotype in spite of the disease stage. Immunohistochemical and molecular analysis has shown that mutation of the tumour suppressor gene p53 may be indicative of an unfavourable prognosis with a reduced overall survival\textsuperscript{[4]}. 
**Table 1:** Supraglottic Laryngeal squamous cell carcinoma 5-year survival, age adjusted by extent (T).

<table>
<thead>
<tr>
<th>Stage</th>
<th>5-year survival %</th>
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<tbody>
<tr>
<td>T1</td>
<td>100</td>
</tr>
<tr>
<td>T2</td>
<td>95</td>
</tr>
<tr>
<td>T3</td>
<td>90</td>
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<tr>
<td>T4</td>
<td>70</td>
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</tbody>
</table>

**Table 2:** Vulval squamous cell carcinoma, 5-year survival, age adjusted.

<table>
<thead>
<tr>
<th>Stage</th>
<th>5-year survival %</th>
</tr>
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<tbody>
<tr>
<td>I</td>
<td>91.1</td>
</tr>
<tr>
<td>II</td>
<td>80.9</td>
</tr>
<tr>
<td>III</td>
<td>484</td>
</tr>
<tr>
<td>IV</td>
<td>15.3</td>
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**Lesson**

These cases emphasize the importance of being vigilant to unusual presentations of metastatic disease. Furthermore their occurrence at these sites may indicate that improved attempts to control disease locally can result in the development of distant metastases. Local control of the disease in the primary site affecting the natural history of tumour growth appears to be the most likely cause of the subsequent distant presentation of disease[5].
References