Case Report

Omental Metastasis of Malignant Phyllodes Tumor: A Case Report

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Abstract

Malignant Phyllodes tumor behaves like sarcomas and has a tendency for local spread and for local recurrence. The metastasis commonly known is blood borne and is usually to the lungs, mediastinum and skeleton rather than to the axillary lymph nodes. In present case of malignant phyllodes tumor there was metastasis to omentum, probably the only reported case in English literature.

Keywords: Malignant Phyllodes Tumor, Omentum, Metastasis, Spindle-Cell Sarcoma

Introduction

Cystosarcoma phyllodes constitutes only 0.3–0.9% of all breast tumors also called, in modern terminology as Phyllodes tumor (PT). The term Phyllodes tumor includes a group of lesions varying from benign and locally recurrent to malignant and metastatic. In a recent surgical series, 6.2% of the tumors were malignant[1,2]. The metastatic potential of the tumor cannot be accurately determined by gross and microscopic pathologic findings but the clinical course is the only sure means of determining it at present .Metastases consists only of stromal tissue and can occur in any area of the body. Most commonly reported are to the lungs and skeleton[2,3]. Here we present a case of metastases of malignant Phyllodes tumor to the omentum probably the only reported case in English literature.

Case History

A 26 year old unmarried woman presented to us with a recurrent right breast lump. She had a history of lumpectomy done twice before; two and four years back respectively, the histopathology on both occasions being benign fibroadenoma. Clinical examination revealed a single, 15cm x 15cm, bosselated, mobile lump in the right breast. The opposite breast, both axillae and supraclavicular fossae were normal. A tru-cut biopsy from the lump revealed a stromal cell sarcoma of the breast. Awaiting surgery the tumor had rapidly progressed and fungated. A simple mastectomy with axillary node sampling was done. The histopathology revealed a malignant cystosarcoma Phyllodes with free margins and negative nodes in the axilla. After a disease free interval of 11 month patients presented with abdominal distension associated with anorexia and constipation. There was no evidence of loco-regional recurrence. Ultrasonography of the abdomen revealed loculated ascites. The liver, ovaries and retro peritoneum were reported normal.

The patient progressively deteriorated while investigating the cause of ascites, diagnosis and the clinical picture suggesting intestinal obstruction, an exploratory laparotomy was performed. This revealed the greater omentum encasing a large mass occupying the whole of the abdomen with multiple cystic spaces and adherent small bowel loops. The liver, ovaries and retro peritoneum were normal. Debulking of the mass with about one foot of adherent jejunum were removed and an anastomosis of the small bowel performed. However, it was not feasible to achieve complete clearance of the disease. The patient expired on the first postoperative day in the intensive care unit, probably consequent to the extremely poor general condition pre-operatively with the subsequent stress of surgery.

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The Histopathological analysis of the debulked omentum showed a spindle-cell sarcoma consistent with metastases in a known case of malignant Phyllodes tumor of the breast [fig. A and B]. The sections from the intestine were unremarkable except for occasional evidence of inflammation.

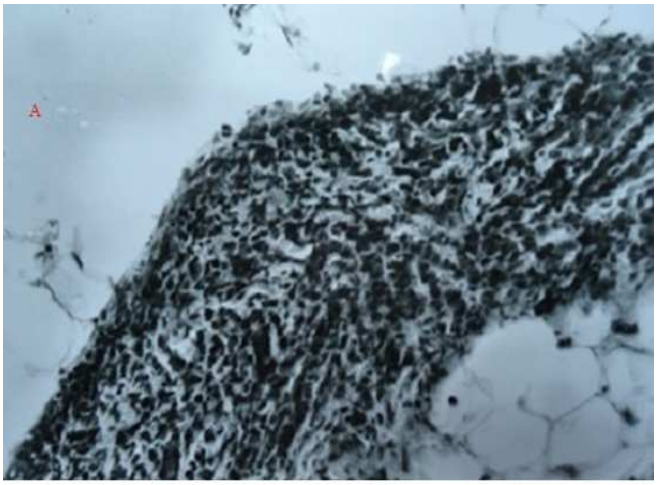

Fig 1: Showing at 100X magnification Omental fat with multiple spindle cells

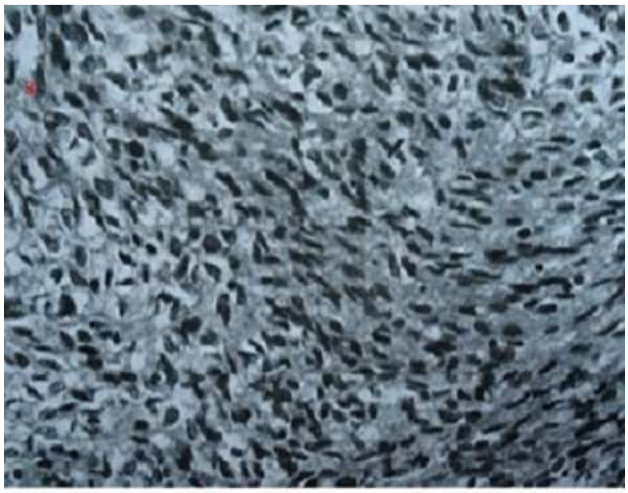

Fig 2: Stroma shows cellular pleomorphism nuclear atypia, high mitotic activity, increase in nuclear cytoplasmic ratio. (400X)

Discussion

The percentage of Phyllodes tumors classified as malignant ranges from 23% to 50% [4, 5]. Axillary metastases are reported in less than 5% of cases, but are a poor prognostic sign when present [6]. Formal axillary dissection seems to be unnecessary, but removal of low axillary lymph nodes cannot be criticized. Metastases commonly follow the pattern seen with sarcomas with the lung as the most common site in 6-22% [5, 7].

Phyllodes tumor akin to sarcomas has a tendency for local spread causing fungation of skin and tendency for local recurrence. The metastasis commonly is blood borne and not lymphatic as metastases is usually to the lungs, mediastinum and skeleton rather than to the axillary lymph nodes. Our surmise is that the Omental spread too must be blood borne.

The optimal treatment for metastatic Phyllodes tumor has not been found but is commonly based on the guidelines for treating sarcomas. Effective palliation is achieved by few. Radiation to symptomatic metastases was helpful. Occasionally these tumors contain estrogen and progesterone receptors, although hormone manipulation was ineffective. In metastatic condition role of various modality like chemotherapy, radiotherapy and hormonal therapy in both the adjuvant and palliative settings remain to defined[8].

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Conflicting Interest: None

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