Phyllodes tumour of the breast: Clinicopathologic analysis and its implication on tumour recurrence

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ABSTRACT

Introduction: Phyllodes tumours represent approximately 1% of all breast neoplasms. These fibroepithelial lesions are recognized for their unpredictable clinical behaviour. Over the past several decades, research has focused on identifying key factors associated with recurrence; However, even the resection margin has yet to be conclusively linked to its recurrence risk. The aim of this study is to identify the clinicopathological factors related to recurrence of phyllodes tumour. **Materials and Methods:** The data of 63 phyllodes tumours (22 benign, 28 borderline and 12 malignant) that were surgically excised at our hospital between 2019 and 2024, were reviewed. Follow-up information including clinical radiological and pathology reports were retrieved. **Results:** Majority of cases were benign phyllodes tumour. Borderline and malignant phyllodes represent 35% and 11% respectively. Mean age of diagnosis was 44-year-old. 14.5% of cases had recurrent phyllodes and majority of them were from malignant group. Two of the cases had recurred as distance metastases. Analysis of tumour margins revealed that more than half of the cases had positive margins (defined as ink on margin or margin < 1 mm), with 16.2% of these cases showing recurrence. However, statistical analysis revealed no significant correlation between margin status and tumour recurrence ($p = 0.407$). In contrast, the presence of necrosis showed a significant correlation with tumour recurrence ($p < 0.01$), while other histological features, such as mitotic rate, infiltrative border, and degree of stromal proliferation, were not significantly associated with recurrence. **Conclusion:** Surgical margin status does not appear to influence the recurrence rate in phyllodes tumours. However, the presence of necrosis is strongly associated with tumour recurrence, highlighting the need for closer monitoring and potentially more aggressive management.

Keywords: Phyllodes tumor, recurrent phyllodes, pathology analysis of phyllodes