## CASE REPORT

# Bilateral and multifocal phyllodes tumours of the breast: A case report

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Phyllodes tumours are rare breast neoplasms that present as painless breast masses. They are classified as benign, malignant and borderline. More rare presentations of these tumours include bilateral asynchronous disease and unilateral multifocal disease. Surgical excision with clear margins remains the treatment of choice for these tumours. The present case report is the first to be discussed in the literature. It describes a patient presenting with synchronous bilateral, multifocal breast phyllodes tumours who underwent immediate reconstruction with tissue expanders at the time of her mastectomies.

Key Words: Breast neoplasm; Phyllodes tumour

# Tumeurs phyllodes bilatérales et multifocales du sein : Rapport de cas

Les tumeurs phyllodes sont de rares néoplasies mammaires qui prennent la forme de masses indolores aux seins. On les classe parmi les catégories bénigne, maligne et limite. Parmi les tableaux plus rares de ces tumeurs, mentionnons la maladie bilatérale asynchrone et l'atteinte unilatérale multifocale. L'exérèse chirurgicale avec marges claires reste le traitement de choix de ces tumeurs. Le présent rapport de cas est le premier à être abordé dans la littérature. Il décrit une patiente présentant des tumeurs phyllodes synchrones bilatérales multifocales qui a subi une reconstruction immédiate avec expanseurs tissulaires au moment de ses mastectomies.

Phyllodes tumours (PTs) are rare breast neoplasms, comprising an estimated 0.5% of all primary breast tumours (1). These neoplasms generally present as unilateral painless, well-circumscribed, mobile breast masses in women 35 to 55 years of age (2). Bilateral tumours are rare and tend to be asynchronous in nature (3). PTs are classified according to their biological behaviour: benign, malignant and borderline (4). These are locally aggressive tumours with a high recurrence rate. Surgery is the main treatment modality (2). The presence of clear margins is the most reliable predictor for local control; mastectomy has more success than breast-conserving surgery in borderline and malignant cases (5). A small percentage of these tumours are malignant. The role of chemotherapy and radiotherapy is controversial (4). Distant metastases are uncommon, occurring in 3% to 13% of cases; the most common site is the lung (1).

We present a case of bilateral, synchronous, multifocal disease in a healthy 42-year-old woman. We believe the present case is the first to be reported in the literature.

#### CASE PRESENTATION

The patient was a 42-year-old woman who presented with multiple bilateral breast masses that she had noted over the previous 12 months; she was referred to a community general surgeon. Her routine annual mammogram confirmed new bilateral, non-calcified masses when compared with the previous investigation. In 1991, the patient was previously seen by one of the authors (UK); she presented with multiple masses in both breasts that were clinically diagnosed as fibroadenomas. At that time, she

refused biopsy or removal of these masses. There was no family history of breast cancer. Clinical examination featured a large mass in the right upper breast with two additional smaller palpable masses in proximity to the areola. The left breast had two mobile masses in the lower outer quadrant and thickening in the superior region. The large mass on the right breast had a core biopsy performed that showed benign PTs. A subsequent ultrasound demonstrated multifocal bilateral masses.

The patient underwent surgery by her primary general surgeon for local excision of these masses. This was achieved via circumareolar incisions. Three palpable masses on the right and four palpable masses on the left were removed and sent for pathological assessment. The largest mass was from the right breast and measured 5 cm  $\times$  4 cm  $\times$  3 cm. The other masses were 2.5 cm in diameter. All masses were benign PTs. The lesions extended to the edge of the tissue specimens in all submitted specimens. Following this surgery, there were fewer palpable masses. However, ultrasound demonstrated multiple residual lesions, and one mass in the peripheral left breast showed rapid growth.

The patient was referred to the BC Cancer Agency and to a surgical oncologist (UK). It was believed that local control could not be achieved without bilateral mastectomies due to the multifocal nature of the disease. The patient was also referred to a reconstructive plastic surgeon (PAL), and elected to proceed with a two-stage nonautologous reconstruction with tissue expander insertion at the time of the mastectomies after discussing her reconstructive options. Pathological examination

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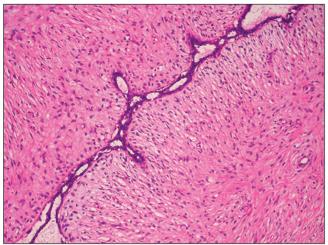


Figure 1) Left breast phyllodes tumour showing 'leaf-like' appearance on microscopy

confirmed all masses in both breasts as benign PTs with clear margins (Figures 1 and 2).

### **CONCLUSION**

The current report presents an interesting and previously unpublished case of synchronous benign, bilateral, multifocal PTs requiring bilateral mastectomies for successful management. The patient underwent immediate nonautologous reconstruction.

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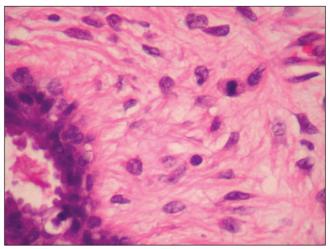


Figure 2) Right breast phyllodes tumour showing mitoses

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