able to withstand major surgery; (ii) possess a ductal anatomy that allows the bypass procedure to drain at least one-third of the functioning liver;[1] and (iii) ipsilateral liver atrophy is absent.

Surgical techniques adopted to bypass the obstruction depend on the tumour location, which includes either segment III or right sectoral intrahepatic cholangiojejunostomy. Surgical palliation to the left liver is a far commoner procedure. This is because the left hepatic duct has a long extrahepatic course that makes dissection and anastomosis much easier. Together with the left portal vein and hepatic artery, this triad lies just under the base of segment IV.

On the other hand, the extrahepatic course of the right main duct is short; therefore, a biliary enteric anastomosis to the right extrahepatic duct would result in early tumour invasion and subsequently, obstruction.

In a study carried out by Memorial Sloan-Kettering[2] of 58 patients with either cholangiocarcinoma or gallbladder cancer, whom were treated with either a segment III or a right sectoral hepatic duct bypass, the group experienced an overall procedure-related morbidity of 45% and a 30-day mortality of 11%. In terms of bypass patency, there was a greater actuarial patency in patients who underwent segment III cholangiojejunostomy.

In our patient, a curative resection is not possible due to bilateral disease. A left cholangiojejunostomy would not adequately provide relief to the obstruction, as the volume of the liver is insufficient. A right sectoral biliary enteric bypass could have been an option in this patient; however, in the presence of segment V disease, the patency of this anastomosis is doubtful. Therefore, an intrahepatic approach to segment V was necessary in order to relieve the patient from recurrent biliary sepsis.

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doi: 10.1111/ans.12329

A giant phyllodes tumour with sepsis

A 48-year-old female from regional Australia presents with a 12-month history of an enlarging lump in her left breast (Fig. 1). She had a sister who developed breast cancer in her 40s but otherwise did not have any significant past medical history or risk factors for breast malignancy.

The lesion was slow growing until 2 months preceding her presentation when there was an onset of rapid growth with the mass doubling in size in that period. Ultrasound and computed tomography (CT) demonstrated a large fluid collection within the breast. Three litres of turbid fluid was drained with growth of methicillin-sensitive *Staphylococcus aureus* and inflammatory changes (Fig. 2). Core biopsy showed changes consistent with pseudoangiomatous stromal hypertrophy (PASH).

While awaiting further investigations, the patient developed fevers, rigors and diaphoresis. Clinical examination at this time demonstrated an enlarged left breast measuring $440 \times 240 \times 160$ mm and areas of pressure necrosis to the superior and lateral aspects

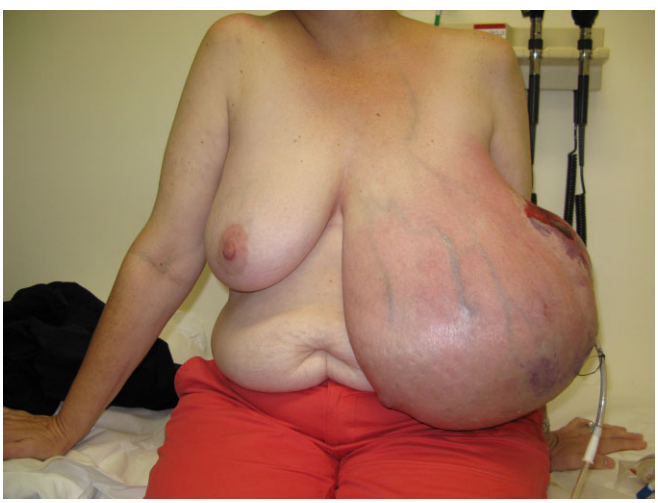

Fig. 1. A 48-year-old female with left breast giant phyllodes tumour (anterior view).

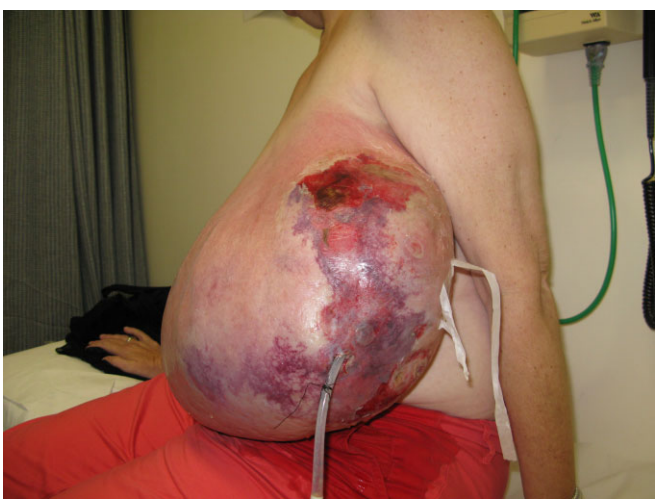

Fig. 2. Lateral view of left breast with a percutaneous drain prior to surgery.

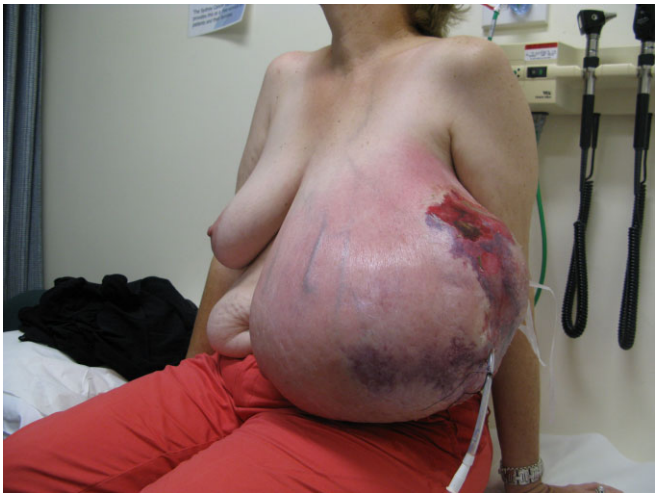

Fig. 3. Anterolateral view of left breast giant phyllodes tumour.

(Fig. 3) of her left breast. She had a markedly elevated white cell count with neutrophilia and raised C-reactive protein of 370 mg/L. A drop in haemoglobin from a baseline of 120 to 85 mg/L was also noted. Repeat CT demonstrated no further collections, disseminated disease or invasion into the chest wall. Intravenous flucloxacilllin was commenced to treat her infectious symptoms. However, she deteriorated and developed sepsis with fevers of 40°C and haemodynamic instability. The extensive necrotic tissue within her breast was assumed as the likely source of the sepsis and a decision was made to perform an emergency mastectomy.

A left-sided mastectomy with level 1 axillary clearance (in view of the size and rapid growth of the breast mass) was performed. Despite its large size, the lesion was well-circumscribed and not adherent to the chest wall which allowed for en bloc resection. Flaps were fashioned to achieve primary skin closure.

The tumour measured 310 × 210 × 195 mm and weighed 6.5 kg with areas of haemorrhage and necrosis. Histopathology revealed a borderline phyllodes tumour with PASH. There was no heterologous differentiation and no features of overt malignancy were observed. The lymph nodes showed no evidence of malignancy. The patient made an uneventful recovery and she was discharged home on post-operative day 4.

Phyllodes tumours are biphasic fibroepithelial tumours first described by Johannes Muller in 1838. They account for approximately 0.5% of all female breast tumours,[1] with peak incidence in females aged between 35 and 55.[2] Phyllodes tumours present as firm, well-defined, painless masses and clinically are often indistinguishable from fibroadenomas[3] and can be classified as benign, borderline or malignant phenotypes according to mitotic frequency, margins, cellular atypia and cellularity for differentiation although there are well-recognized limitations of histological grading of phyllodes tumour.[4] Metastasis occurs predominantly via haematogenous spread to the lung, bone and liver.[3] Axillary lymph node metastases are rare.[2]

Tumour size is not a significant prognostic factor and there is no demonstrable association between tumour size and metastasis.[3] 'Giant' phyllodes tumours are defined as being greater than 10 cm in diameter and up to 20% of phyllodes tumours are 'giant' at presentation.[5] Our patient, with a phyllodes tumour of 31 cm, is one of the largest phyllodes tumours reported in literature. Literature search reveals only nine cases of phyllodes tumours greater than 30 cm in diameter. An additional unique feature of this case was the development of sepsis necessitating emergency mastectomy.

Emergency mastectomy is a rare occurrence with only few reported cases in literature. The few indications include acute haemorrhage and life-threatening sepsis.[6,7] Haemorrhage may be secondary to the neoplasm, macromastia or trauma.[6,8,9] Life-threatening sepsis can occur when there is breakdown of skin integrity of breast skin, providing a route for infection of necrotic breast. However, there are no previous reports of giant phyllodes tumour requiring emergency mastectomy secondary to life-threatening sepsis.

In summary, we present a case of a giant phyllodes tumour, which was complicated by life-threatening sepsis and necessitated an immediate, life-saving mastectomy.

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doi: 10.1111/ans.12340