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# A case report of small bowel obstruction from previously undiagnosed lobular breast carcinoma: First in Australian literature\*



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#### ABSTRACT

INTRODUCTION: This case report is the first in the Australian literature of a patient, without prior diagnosis, presenting with a bowel obstruction secondary to lobular breast cancer. This highlights a relatively rare cause of bowel obstruction, but also the importance of breast self-examination as a compliment to the current BreastScreen Australia program.

PRESENTATION OF CASE: A 67-year-old female presented to the Emergency Department with a 48-h history of sharp, constant epigastric pain, vomiting and constipation. The patient proceeded to emergency laparotomy for presumed large bowel obstruction, which revealed a stricture in the distal terminal ileum causing a distal small bowel obstruction. A right hemicolectomy was performed. Histopathology revealed the terminal ileum stricture to be metastatic lobular breast carcinoma. Clinical examination of the patient's right breast revealed a lesion suggestive of the primary malignancy despite a normal ultrasound and mammogram in 2014. After failing to progress, a CT scan was performed which revealed progressive small and large bowel distension. A repeat laparotomy was performed revealing dilated large bowel without obstructing pathology and an intact anastomosis. A loop ileostomy was performed. Following a further febrile episode, the patient decided to withdraw care and the patient passed away three weeks into her admission from suspected intra-abdominal sepsis.

DISCUSSION: Breast cancer is becoming the third most common cancer amongst Australian women with a significant burden of disease and mortality.

CONCLUSION: Despite the rare presentation, this case reminds the medical community and general population of the importance of breast self-examination and the BreastScreen Australia program.

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# 1. Introduction

This case report is the first in the Australian literature of a patient, without prior diagnosis, presenting with a bowel obstruction secondary to lobular breast cancer. This highlights a relatively rare cause of bowel obstruction, but also the importance of breast self-examination as a compliment to the current BreastScreen Australia program.

The authors would like to acknowledge that this work has been reported in line with the SCARE statement [1].

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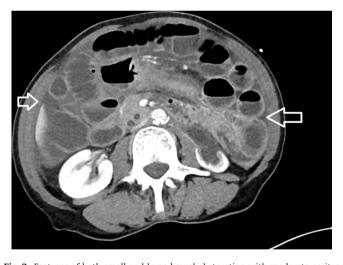
# 2. Presentation of case

A 67-year-old female presented to the Emergency Department with a 48-h history of sharp, constant epigastric pain, vomiting and constipation. Her bowels had opened earlier that same day and reported passing flatus since. She denied bleeding per rectum or other symptoms. Her past surgical history included an open right femoral hernia repair, vaginal converted to transabdominal hysterectomy and a coronary artery bypass graft. Her past medical history included ischaemic heart disease, chronic obstructive pulmonary disease, hypertension, hypercholesterolaemia, gastro-oesophageal reflux disease and depression. She denied any previous colonoscopies or significant family history. On examination, she appeared comfortable and her observations were within normal limits. Her abdomen was distended and generally tender without peritonism. The remainder of her examination was unremarkable, with no palpable herniae. Laboratory investigations revealed a leucocytosis  $(12 \times 10^9 / L)$  with otherwise normal biochemistry, including lipase and lactate. Urinalysis was unremarkable. Abdominal x-rays revealed dilated loops of small

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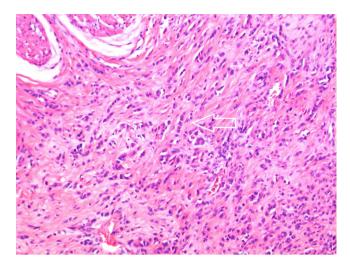
**Fig. 1.** Dilated loops of small bowel without colonic distension are seen on this abdominal x-ray. There is no subdiaphragmatic free gas present.



**Fig. 2.** Features of both small and large bowel obstruction with moderate ascites can be seen on the computed tomography of the abdomen (left arrow). A transition point was seen in the proximal transverse colon without an obvious lesion (right arrow).

bowel without colonic distension and no free subdiaphragmatic gas (Fig. 1). Computed tomography (CT) of the abdomen revealed features of both small and large bowel obstruction with moderate ascites (Fig. 2). A transition point was seen in the proximal transverse colon without an obvious lesion.

The patient proceeded to emergency laparotomy for presumed large bowel obstruction. This revealed gross ascites and a miliary appearance to the serosa throughout the visible bowel. A stricture was found in the distal terminal ileum causing a distal small bowel obstruction. No lesion was identified on palpation of the entire colon. The decision to perform a right hemicolectomy



**Fig. 3.** On the high power ( $100 \times$  magnification) haematoxylin and eosin stained histopathological specimen from the right hemicolon, the single filing of polygonal cells into linear cords and the presence of intracytoplasmic and perinuclear vacuoles can be seen (see arrow). These are features typical for lobular carcinoma of breast origin.

was made with a functional end-to-end stapled anastomosis reinforced with 3-0 PDS. No evidence of liver or peritoneal disease was found. Histopathology revealed the terminal ileum stricture to be metastatic carcinoma with morphology and immunoprofile in keeping with metastatic lobular breast carcinoma (oestrogen and progesterone receptor positive; Her2 negative) (Fig. 3). Five of five mesenteric lymph nodes were involved with metastatic disease. Further clinical examination revealed a 1 cm firm, palpable mass in the right breast at 8 o'clock, 1 cm from the nipple suggestive of the primary malignancy. This was despite the patient having had a normal ultrasound and mammogram in 2014. CT brain and bone scan were unremarkable. Repeat breast ultrasound and mammogram with core biopsy to confirm the primary lesion was scheduled for after the patient had recovered. Medical oncology opinion was sought and hormonal therapy was suggested if the patient's current condition improved.

After failing to progress by post-operative day 8, with ongoing tenderness, distension and rising C-reactive protein (CRP), a CT scan was performed which revealed progressive small and large bowel distension with the transition point seen at the splenic flexure. A repeat laparotomy was performed by a covering surgeon at the time. This revealed dilated large bowel up to the splenic flexure without obstructing pathology. The anastomosis was interrogated and found to be intact. The decision was made to perform a loop ileostomy. The stoma was functional three days following her second laparotomy. However, following an episode where the patient became febrile, tachypnoeic and tachycardic with a rising CRP, the patient decided to withdraw care. Arrangements for palliation were made and the patient passed away three weeks into her admission from suspected intra-abdominal sepsis.

# 3. Discussion

This case is the first in the Australian literature of a patient, without prior diagnosis, presenting with a bowel obstruction secondary to lobular breast cancer. This highlights a relatively rare cause of bowel obstruction, but also the importance of breast self-examination as a compliment to the current BreastScreen Australia program [2].

In 2016, breast cancer is estimated to become the third most commonly diagnosed cancer, with 16,084 new cases of breast cancer expected to be diagnosed in Australia alone [3]. Lobular breast

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cancer represents approximately ten per cent of all breast cancer, but more frequently metastasises to bowel than other breast cancer sub-types. Current five-year survival rates for lobular breast cancer are around eighty-five percent [4].

The most common sites for gastrointestinal metastases from lobular breast cancer are reported to be colon and rectum (45%) and stomach (28%) [5]. Chemotherapy and hormonal therapy are the mainstay for treatment of patients with locally advanced and metastatic disease. Despite this, median survival remains around two and half years [6].

#### 4. Conclusion

Breast cancer is becoming the third most common cancer amongst Australian women with a significant burden of disease and mortality. Despite the rare presentation of lobular breast cancer as a small bowel obstruction, this case reminds the medical community and general population of the importance of breast self-examination and the BreastScreen Australia program.

## **Conflicts of interest**

No conflicts of interest.

#### **Funding**

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# **Ethical approval**

Ethics approval is currently being sought and pending approval.

#### Consent

Verbal consent was obtained and documented in the patient's chart for writing and submission of this case report for publication, prior to the patient's death.

## **Authors contribution**

Writing of case report: Adam Cristaudo. Supervising consultant and proof-reading: Katherine Zhu.

#### Guarantor

Adam Cristaudo.

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