

ORIGINAL ARTICLES

An isolated abdominal wall metastasis of ovarian carcinoma ten years after primary surgery

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Summary

This report describes the case of a woman with early stage ovarian carcinoma who developed an isolated metastasis in the anterior abdominal wall following an apparent disease-free interval of ten years. The management of the case is discussed and important factors are highlighted. Comparison is also made to the phenomenon of port-site recurrence following laparoscopy in cases of ovarian carcinoma.

Key words: Ovarian carcinoma; Metastasis.

Introduction

Recurrences of carcinoma of the ovary usually occur within the first five years after initial surgery and generally involve widespread metastases throughout the peritoneal cavity. We present a single recurrence within the anterior abdominal wall, in the absence of other obvious metastasis, after a disease-free interval of ten years.

Case Report

A 52-year-old woman presented to her local district general hospital in 1989 following the detection of a pelvic mass at the time of her routine cervical smear. This mass extended to the level of the umbilicus. Laparotomy was performed through a transverse supra-pubic incision. A large multilocular cyst arising from the right ovary was found. There was a small amount of ascites present. The left ovary appeared normal. A total abdominal hysterectomy and bilateral salpingo-oophorectomy was performed. Two small omental biopsies were taken. During surgery the cystic mass ruptured.

The patient made an uneventful recovery. Histology revealed the mass to be a well-differentiated endometrioid cystadenocarcinoma which appeared to be confined to one ovary. A CT scan performed three weeks after surgery revealed no evidence of residual disease. No adjuvant chemotherapy was given. Ca 125 levels, taken every six months, remained within normal limits. The patient remained asymptomatic. Five years after initial treatment a further CT scan showed no abnormality and therefore the patient was discharged.

A further five years later the patient, then 62 years old, complained of lower abdominal discomfort. She had no urinary or bowel disturbance nor any other symptoms. On examination there was a 12 cm diameter hard, mobile mass in the anterior abdominal wall at the site of her scar. The overlying skin appeared normal. A CT scan confirmed the presence of an anterior abdominal wall mass (see figure). There was no evidence of deep extension or other metastatic disease. Examination under anaesthetic confirmed the mass to be anterior and superior to be bladder. Cystoscopy was normal. An ultrasound directed biopsy was performed. This reported the mass to be a well-differentiated

adenocarcinoma, possibly of endometrioid type, compatible with a recurrence of her ovarian primary carcinoma.

At operation the mass was cystic in nature and appeared to arise from the origin of the right rectus abdominus muscle. It extended across the midline and almost up to the level of the umbilicus. The tumour was adherent to the bladder. This made complete excision difficult. The mass, including an area of peritoneum was excised, and an infra-colic omentectomy was performed. A thorough examination of the peritoneal cavity revealed no other visible metastatic disease. The abdominal wall defect was repaired with a Marlesh mesh. The patient had an uneventful postoperative recovery. At follow-up there was no evidence of wound herniation.

Histology confirmed metastatic adenocarcinoma with incomplete excision, as anticipated. Adjuvant chemotherapy was then given in the form of six cycles of paclitaxel 300 mg iv and carboplatin 570 mg iv. The patient remains well, with a normal Ca 125 level, one year after excision of the abdominal wall mass.

Discussion

Ovarian carcinoma is the most common gynaecological malignancy in the UK and the fourth most common cause of cancer death in women. The majority of cases present with spread to the organs within the peritoneal cavity and over 70% are FIGO stage 3 or 4 at presentation. After initial treatment, recurrences usually occur within the first five years [1].

There has been interest recently in the phenomenon of port site recurrences following laparoscopic surgery for ovarian malignancy [2-5]. The occurrence of these is associated with disseminated intra-peritoneal disease which presents within weeks of surgery as microscopic or seedling tumours. In this case a single, large recurrence occurred, within the abdominal wall, in the absence of widespread disease. In addition, there was an apparent disease-free interval of ten years. This case shows that abdominal wall recurrences are not purely a complication of minimal access surgery, although they may be much less common following open surgery.

Revised manuscript accepted for publication November 20, 2000

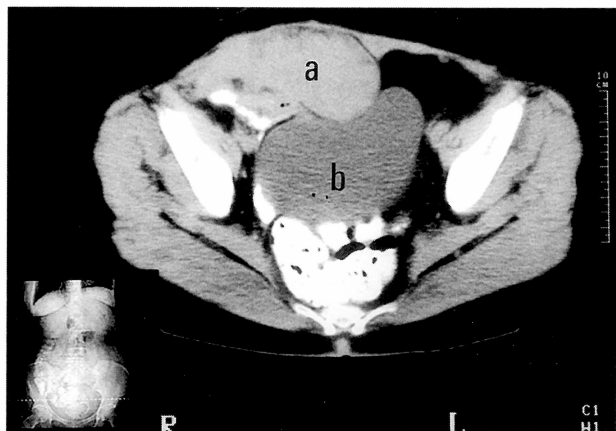


Figure 1. — a) Tumour - b) Bladder

Cutaneous recurrences of ovarian carcinoma are known to occur, indeed the ovary is the fourth most common origin of skin metastasis in women [6]. However, when cutaneous metastases are present, the disease is usually advanced with widespread intra-peritoneal involvement. This case is unusual in that the recurrence was confined to the abdominal wall and the skin overlying it was normal.

It is well documented that a significant number of apparently stage I ovarian carcinomas are found to be more advanced if formal staging is performed at the time of surgery [7]. The staging of this case could be regarded as sub-optimal given that no formal staging laparotomy was undertaken and neither an omentectomy nor peritoneal biopsies were performed. In addition, the assessment of residual disease, once the diagnosis was made, was by CT scan. However, the lack of intra-peritoneal disease recurrence and the long interval to recurrence suggests that there was no microscopic disease within the peritoneum at the time of initial surgery. As the tumour appeared to be confined to the ovary, this was presumed to be stage I disease. The rupture of the capsule at the time of surgery might be considered as an indication for adjuvant treatment. However, Dembo *et al.* [8] did not find tumour rupture to be a negative prognostic factor and, with a 5-year relapse-free rate of 98%, they did not advocate any additional treatment after surgery in women with this stage of disease.

This case highlights the need for appropriate surgery for potentially malignant ovarian masses. It is likely that

the spread to the abdominal wall occurred at the time of surgery and cyst rupture. Midline incisions are recommended as they can be enlarged to reduce the risk of tumour rupture. More importantly, they allow for a proper staging laparotomy with omentectomy to be performed. In this case the transverse supra-pubic incision would not allow for adequate inspection of the peritoneal cavity nor for adequate surgery.

The prolonged disease-free interval, which although unusual is not unheard of [9], also highlights the need for long-term follow-up in cases of ovarian malignancy given that some cases of ovarian carcinoma may follow a more indolent course.

Acknowledgement

Dr. Haughney is supported by the Gardner Research Fellowship.

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