Case Report

Conversion of a gastric band into an intraperitoneal port in a patient with optimally debulked stage 3C serous ovarian carcinoma

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Introduction

Intraperitoneal (IP) chemotherapy in women with optimally debulked stage 3 ovarian cancer improves overall survival and progression-free survival, and its use has been encouraged in the adjuvant treatment of appropriately selected patients (Armstrong et al., 2006; Jaaback and Johnson, 2006). We describe a case in which a previously inserted adjustable gastric band was converted to an IP chemotherapy port during a laparotomy for advanced ovarian cancer.

Case report

A 44 year old woman was referred with suspected metastatic ovarian cancer and ascites. Her past medical history included a laparoscopy and insertion of an adjustable gastric band 12 years earlier, and total hysterectomy and right salpingo-oophorectomy 6 years earlier for benign disease.

At laparotomy there was a 3 cm left ovarian mass with pelvic side wall and left ureteric involvement, large volume omental tumour and extensive miliary peritoneal disease. Adhesiolysis and ureterolysis were performed followed by left infundibulopelvic ligament ligation and a radical left salpingo-oophorectomy. Frozen section reported an adenocarcinoma of ovarian origin. On assessment of the upper abdomen, the intraperitoneal tubing of the gastric band was encased by tumour and adherent omental metastases. To achieve optimal cytoreduction, and because of the potential difficulties associated with subsequent removal of the gastric band after IP chemotherapy, the device was removed. The omentum and gastric band tubing were mobilised, the lesser sac was entered and the gastroesophageal junction identified. The band was released and cut (see Fig. 1) and the subcutaneous Infusaport section of the device was retained and converted into an IP port (see Fig. 2). During closure, the retained Infusaport was tested for peritoneal infusion using heparinised saline. At the conclusion of the surgery the residual disease was 0.5 cm of miliary tumour.

Histopathology confirmed a FIGO stage 3C, high grade serous adenocarcinoma of the ovary. The patient successfully completed 6 cycles of IP Cisplatin 135 mg, IP Paclitaxel 125 mg and intravenous Paclitaxel 225 mg without any adverse effects or delays in treatment. There were no difficulties in accessing the converted gastric band Infusaport, however it varied from other IP ports in that it’s bulb was located more deeply within the subcutaneous tissue and required a two finger stabilisation technique for use. The port was removed after completion of chemotherapy (see Fig. 3) and histopathology confirmed no seeding of tumour along the tubing.

Discussion

Obesity is a public health issue of epidemic proportions and there is a well-recognised association between obesity and certain ovarian cancer subtypes (Olsen et al., 2013). As the number of bariatric surgical procedures increases in line with obesity rates, gynecologic oncologists may more frequently encounter gastric bands at laparotomy in patients with advanced ovarian cancer. Abdominal complaints after bariatric surgery, such as weight gain, dyspepsia and distension, are often explained by surgical complications or poor eating habits. However, in a middle-aged woman who presents with abdominal distension following a gastric banding procedure, ovarian disorders must be considered in the differential diagnosis (Tenhagen et al., 2012).

The decision to separate the subcutaneous Infusaport from the inflatable band piece and convert it to an IP port at the time of surgery spared our patient further surgery and the need for a new port. The removal of the adjustable part of the band was essential to eliminate the risk of future complications, such as gastric erosion or slippage (Snow and Severson, 2011), which would be difficult to manage surgically following intraperitoneal chemotherapy due to the high likelihood of adhesions.
Removal of the gastric band was required in order to achieve optimal cytoreduction and the histopathology confirmed that the tissue adherent to the band contained malignant cells. Leaving the Infusaport in situ may carry a potential risk of subcutaneous metastasis as malignant cells may have seeded along the tubing to the subcutaneous tissues adjacent to the Infusaport. The patient’s Infusaport site will be monitored closely for this during her follow-up.

This is the first reported case of a gastric band being adherent to upper abdominal metastases from an ovarian carcinoma and describes a novel technique of conversion of a gastric band to an IP chemotherapy port.

Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal on request.

Conflicts of interest

No authors have funding or conflicts of interest to declare.

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