Jejunal gastrointestinal stromal tumour masquerading as an ovarian cancer: A case report

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SUMMARY

A 60-year-old lady presented with lower abdominal discomfort and a huge palpable intra-abdominal mass for 4 months, with significant weight loss over half a year. Transvaginal ultrasonography and computed tomography (CT) abdomen showed a large right solid cystic mass likely ovarian in origin. The CA-125 was raised. With the provisional diagnosis of ovarian cancer patient underwent laparotomy at Hospital Umum Sarawak, Malaysia. However intraoperative findings showed that uterus and both ovaries were normal. The tumour was arising from the jejunum and adherent to the dome of the urinary bladder and right broad ligament. The tumour was resected and final diagnosis was jejunal gastrointestinal stromal tumour (GIST). We described this case which was misinterpreted as an ovarian cancer.

INTRODUCTION

Gastrointestinal stromal tumour (GIST) is the most common primary mesenchymal tumours of gastrointestinal tract and the cell of origin is the interstitial cell of Cajal.1 About 75% of GISTs have mutations in tyrosine kinase, and 10% have mutations in PDGFRα. GIST is typically a disease of adults in 5th or 6th decade of life. It is relatively more common in males. GIST can arise anywhere from oesophagus to rectum but common sites are stomach (50-60%) jejunum, ileum (25-35%) and duodenum (10%).[1]

Clinical features of small bowel GISTs include, gastrointestinal bleeding, abdominal pain, abdominal mass or intestinal obstruction.[1,2] Sometimes they are discovered incidentally on endoscopy or imaging performed for some other reason. Surgical resection is the mainstay of treatment. Asymptomatic small bowel GISTs smaller than 2 cm may be observed and treated conservatively.

CASE REPORT

A 60-years-old lady presented to the Sarawak General Hospital with lower abdominal discomfort and palpable abdominal mass for 4 months, associated with anorexia and significant loss of weight. Systemic review was unrevealing. She had past history of hypertension, dyslipidaemia and gout. There was no family history of malignancy or anaemic symptoms. Abdominal examination showed large, intra-abdominal mass at right lower quadrant. The mass was non-tender, firm in consistency and mobile side to side. Its upper margin was reaching up to umbilicus but lower margin was not reachable. Rest of systemic examination was unrevealing.

Laboratory tests revealed a low haemoglobin level (8.1g/dl), otherwise no abnormality was seen in the total white cells, platelets count, liver and renal functions, and coagulation profile. Tumour markers showed elevated CA -125 =64.2U/ML (normal <35U/ML) but normal CEA

Abdominal and transvaginal ultrasonography showed a large, solid, irregular right adnexal mass. A Computerised tomography scan (CT) showed a large well-encapsulated solid-cystic pelvic mass measuring 11.5 x 16.7 x 17.4 cm arising from the right adnexa with no clear plane with dome of urinary bladder and right round ligaments suggestive of a malignant ovarian tumour (Figure 1). There was no evidence of liver or peritoneal metastasis.

With the provisional diagnosis of ovarian cancer, the patient underwent laparotomy under gynaecological team. Intraoperatively, the tumour was found to be arising from the antimesenteric border of jejunum 20 cm from the duodenojejunal junction measuring 18 x 16 cm. The tumour was adherent to the dome of urinary bladder and right broad ligament of uterus. There were no enlarged mesenteric lymph nodes or peritoneal nodules. Uterus and both ovaries were normal. Patient was then referred to on call general surgical team. With an intraoperative diagnosis of jejunal GIST, the tumour was resected with a gross clear margin. Serosal defect at the dome of urinary bladder repaired with vicryl 3/0 suture. About 15 cm segment of jejunum was resected en-block with tumour and anastomosis performed (Figure 2). The tumour was very vascular and intraoperative blood loss was about 500 ml.

Post operatively patient recovery was uneventful. She was started on clear fluids on day1, liquid diet on post-operative day 2 and progressed to soft diet on day3. She was discharged on post-operative day 6.

Histopathological examination revealed tumour with spindle cell proliferation arranged in vague fascicular, storiform and haphazard patterns with extensive areas of necrosis. The tumour cells displayed mild nuclear pleomorphism. Mitotic count was about 30/50hpf. No marked nuclear atypia or abnormal mitotic figures noted. The tumour involved the submucosa, muscularis propria and serosa of the small intestine. All resected margins were free of tumour. In

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