CASE REPORT

Uterine fibroid or ovarian fibroma: importance of comprehensive preoperative consent-taking to include unexpected findings with management implications

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SUMMARY

A 35-year-old woman presented with an abdominal mass found incidentally on an ultrasound scan. On examination, the uterus was mobile and 14 weeks in size. Further imaging showed a large subserosal pedunculated fibroid, and she was counselled for laparoscopic myomectomy, morcellation in a bag, kept in open view. Intraoperatively, the mass was noted to be arising from the right ovarian ligament instead of the uterus, and decision was made to convert to open surgery. This case highlights important issues of consent-taking preoperatively and critical points to note regarding change in operative consent intraoperatively. This also highlights the importance of multidisciplinary cooperation as the decision had to be made with inputs made from gynae-oncology and pathology.

BACKGROUND

We report a case of a large ovarian ligament fibroma presenting as a pedunculated uterine fibroid on ultrasound pelvic scan. This case was initially listed for laparoscopic myomectomy with morcellation in a bag but was subsequently converted into an open mass resection and frozen section intraoperatively. This case highlights the diagnostic dilemma of a large ovarian fibroma which, in turn, demonstrates the importance of thorough preoperative counselling during consent taking. We also illustrate the steps taken in modifying surgical consent intraoperatively with the patient's next-of-kin's consent. The role of a multidisciplinary approach is also crucial in this decision-making process.

Figure 1 Sagittal section of preoperative ultrasound image.

Figure 2 Coronal section of preoperative ultrasound image.

CASE PRESENTATION

Our patient is a 35-year-old nulliparous Chinese woman who presented with a 12 cm abdominal mass found on an ultrasound scan. On physical examination, the uterus was 14 weeks in size and mobile. She was planned for laparoscopic myomectomy with morcellation in a bag kept in open view. She was counselled regarding the risk of morcellation and possibility of dissemination of fibroids as well as upstaging of malignancy if the mass is leiomyosarcoma. The patient was keen to proceed laparoscopically nonetheless.

INVESTIGATIONS

Pelvis ultrasonography showed a $10.9 \times 10.0 \times 7.3$ cm subserosal pedunculated fibroid in the posterior wall with tiny cystic foci within it (figures 1 and 2). Serum CA-125 was slightly elevated at 98.1, and lactate dehydrogenase was 203.

DIFFERENTIAL DIAGNOSIS

The findings on pelvic ultrasonography demonstrate a subserosal pedunculated fibroid, but differentials should still include other solid pelvic organ tumours such as ovarian tumours or bowel masses.

TREATMENT

Intraoperatively, a 14 cm mass was seen arising from the right ovarian ligament (figure 3). The uterus was normal and about 8 weeks in size with a 1 cm subserosal fibroid and a 1 cm right fimbrial cyst. Bilateral ovaries were normal. No ascites was seen.

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Figure 3 Intraoperative photo demonstrating ovarian fibroma.

Discussion was held with the pathologist and gynae-oncologist intraoperatively, primarily discussing regarding the feasibility of continuing with a laparoscopic approach. However, in view of the possibility of malignancy in a solid adnexal mass, it was unanimously decided that morcellation will affect histological integrity and subsequent management. The decision was then made for conversion to open surgery with frozen section, keep in view fertility sparing staging surgery. The team consultant then counselled the patient's husband in detail regarding the intraoperative findings using photos above, obtaining the consent to proceed with the surgery.

OUTCOME AND FOLLOW-UP

Open resection of right ovarian ligament mass was done, and frozen section showed a fibroma. Surgery was otherwise uncomplicated, and a 15 cm mass was eventually resected (figure 4). Final histology confirms a right ovarian ligament fibroma with infarction.

Figure 4 Final histological specimen.

DISCUSSION

Ovarian fibromas are the most common benign solid tumour of the ovary. They can present with an abdominal mass or torsion but are commonly asymptomatic. The presence of an intrapelvic solid tumour can be difficult to differentiate from uterine leiomyomas, other solid ovarian tumours or ovarian malignancy. Ovarian fibromas can be associated with raised tumour marker levels and ascites, and this could lead to a mistaken preoperative diagnosis of ovarian malignancy. Conversely, studies have also shown that approximately 30%–40% of patients with ovarian fibromas were misdiagnosed preoperatively as uterine myomas.^{1 2} Preoperative diagnosis of ovarian ligament fibroma poses a definite diagnostic challenge.

The importance of preoperative counselling in the presence of an intrapelvic solid tumour is of utmost importance. While uterine myomas are common, it is important to adequately counsel a patient who has a pedunculated fibroid regarding the possibility of the mass being of ovarian origin. The subsequent management of an uterine myoma is vastly different from that of a solid ovarian tumour, and both possibilities should be discussed adequately. The possibility of malignancy and risks associated with morcellation needs to be covered preoperatively as well to constitute informed consent.

Surgical management of ovarian fibromas remains debatable. Studies have shown that laparoscopic removal of ovarian fibromas can be undertaken with shorter operative time and hospital stay.³ Morcellation of the ovarian fibromas was described to be done in an endopouch, which is similar to laparoscopic myomectomy to prevent spillage. However, there is insufficient evidence to support the use of morcellation in presumed ovarian fibromas due to the risk of malignancy.⁴ A study by Froyman *et al* looked at 181 patients with solid ovarian masses thought to be fibroma/fibrothecoma according to ultrasound. Seven per cent (13/181) of all the patients thought to have fibroma/fibrothecoma turned out to have malignant tumours. In the subgroup analysis of these patients, 3.4% (3/89) of those whom ultrasound investigators were certain about the benign nature of the lesion turned out to be malignant. Hence, while laparoscopic approach can shorten postoperative recovery time and pain, there is limited evidence to support the use of morcellation for retrieval of a solid ovarian tumour due to the risk of malignancy.

In the event of an unexpected finding intraoperatively, this case highlights the importance of adequate discussion between members of multidisciplinary team to ensure an appropriate treatment plan is achieved. In this instance, the gynae-oncologist was consulted intraoperatively to review the evidence regarding the safety of laparoscopic approach in this patient. The

Learning points

- ▶ Consider ovarian solid tumours in the presence of a pedunculated uterine leiomyoma.
- ▶ Laparoscopic approach can be considered in such patients; however, preoperative counselling is of utmost importance and should include the risk of malignancy and associated morcellation risk.
- ▶ In the event of an unexpected finding intraoperatively, surgeons should consider modifying the surgery with the help of colleagues from other disciplines. Surgeons should not hesitate to speak to the family with regards to change in surgical approach or procedure, taking into account patient's preferences and safety.

pathologist was also consulted with regards to the adequacy of the histology of a morcellated specimen in the diagnosis of solid ovarian tumours. Steps were then taken to involve the patient's next-of-kin to obtain consent for frozen section and the possibility of fertility sparing staging surgery. After thorough examination and consideration, decision was then made for change in surgical approach and procedure. Such decisions should not be undertaken lightly, and considerations should take into account patient preference on top of her well-being in a bid to achieve best possible outcome.

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