Giant appendiceal mucocoele mimicking an ovarian tumour

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DESCRIPTION

A 70-year-old multiparous woman was diagnosed with an ovarian tumour at a local obstetrics and gynaecology clinic with abdominal pain that started 2 weeks prior and was transferred to our hospital.

A movable mass as large as the woman's fist was palpated in the right adnexa on pelvic examination. Pelvic ultrasonography showed a 9×5×4 cm well-defined mixed echogenic mass in the right pelvic cavity. Contrast-enhanced abdominal CT showed a 9×5×4 cm well-defined solid cystic mass with low signal intensity in the right ovarian fossa ([figure 1](#)).

Tumour markers were within normal limits (CA125: 13.1 U/mL and CA19-9: 10.63 U/mL).

Under general anaesthesia, exploratory laparoscopy was performed on suspicion of ovarian tumour. The uterus and both adnexa were normal. The mass was located near the right ovarian fossa, but it was an oval-shaped giant cyst originating from the appendix. Neither enlargement of lymph nodes around the mass nor metastasis was found. We removed the mass carefully through the endobag after complete surgical resection ([figure 2](#)). No major intraoperative complications were noted.

Based on gross findings, the appendix showed an oval-shaped cystic expansion filled with thick mucus. Microscopic finding revealed that the appendix was composed of a mucinous cystic lesion with mucin containing a tall columnar cell lining; hence, the patient was diagnosed with a benign mucinous tumour of the appendix ([figure 3](#)).

The patient made an uneventful postoperative recovery and was discharged home on the fourth postoperative day.

Appendiceal mucocoele is a benign or malignant tumour that arises in the appendix and refers to a condition of expanded appendix with a lumen full of abnormal mucoid substances.^{1 2}

Figure 1 (A) Pelvic ultrasound reveals a well-defined mixed echogenic mass measuring 9×5×4 cm within the right adnexa. (B) Contrast-enhanced abdominal CT shows a 9×5×4 cm well-defined solid-cystic mass with low signal intensity within the right adnexa.

Figure 2 Intraoperative findings. (A) Oval-shaped giant cyst originating from the appendix located near the right ovarian fossa. (B) Complete surgical resection was performed.

The incidence is relatively rare at 0.2%–0.3% in patients who had appendectomy, and cases preoperatively diagnosed in early stage are known to be very rare.³

Appendiceal mucocoele may mimic other adnexal lesions such as tubo-ovarian abscess, hydrosalpinx and ovarian mucinous tumour.^{4 5}

Approximately 25% of cases of mucocoele of the appendix are symptomless and identified by chance.

Most cases are found during examinations due to lower abdominal pain.

Delayed diagnosis due to the abovementioned reasons or intraperitoneal rupture due to careless practice during surgery may result in complications, including pseudomyxoma peritoneum.

Appendiceal mucocoele yields a favourable prognosis in cases without complications, such as

Figure 3 Histologic features of the appendix. The appendix shows a mucinous cystic lesion with mucin containing tall columnar cell lining (H&E, 200×).

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pseudomyxoma peritonei. In addition, it is rarely malignant, and a differential diagnosis is important given that it appears in the form of an intra-abdominal mass or submucosal tumours in the cecum.

Learning points

- ▶ Appendiceal mucocoele is benign or malignant tumour that arises in the appendix.
- ▶ Approximately 25% of mucocoele of the appendix are symptomless and are found by chance and most cases are found during examinations due to lower abdominal pain.
- ▶ Rupture during the surgery may cause pseudomyxoma peritoneum, and background knowledge on such case is required and careful removal is essential.

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2: Drafting the manuscript: SYL and DHC. Revising the manuscript critically for important intellectual content: SYL and DHC.

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