Sclerosing Stromal Tumor and Fibroma Occuring Simultaneously in Both-sided Ovaries: A Rare Occurrence

Sir,

Sclerosing stromal tumor (SST) is an uncommon benign ovarian neoplasm, and it accounts for only 0.16% to 0.48% of all primary ovarian tumors.^{1,2} On the other hand, fibroma is a common benign ovarian tumor, accounting for 5% to 8% of all ovarian tumors. Simultaneous occurrence of these two neoplasms on different sides is extremely infrequent.^{3,4} Herein, we report a relatively rare patient who simultaneously developed SST in the left ovary and fibroma in the right ovary.

A 28-year female had a palpable mass in the pelvic cavity, which was found on health examination. The abdominal ultrasound indicated a 4.8×3.7 cm cystic and solid mass in the left ovary (Figure 1 A-B) and a 3.2×2.2 cm cystic mass in the right. The tumor markers, including CA-125, sex hormones, HE4, and HCG, were normal. Intraoperatively, about 100 ml pale yellow ascitic fluid was observed in the abdominal cavity. Subsequently, both-sided masses (Figure 2 A-B) were removed using laparoscopy. The postoperative pathological findings indicated SST in the left ovary and fibroma in the right (Figure 3 A-B).

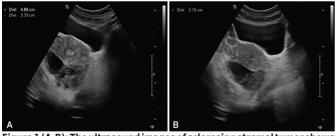


Figure 1 (A-B): The ultrasound images of sclerosing stromal tumor shows a round tumor in the left ovary with cystic and solid mixed echo.

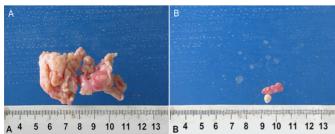


Figure 2: Gross images of sclerosing stromal tumor (A) and fibroma (B). The appearance of sclerosing stromal tumor shows a transparent capsule. Cut surface reveals a cystic-cum-solid lesion, with a gray-white and slightly red color. The fibroma has a complete capsule and displays a round and smooth surface.

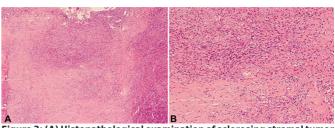


Figure 3: (A) Histopathological examination of sclerosing stromal tumor shows that the tumor cells are spindle-shaped, round, and signet ringlike, with eccentric nuclei and extensive proliferation of thin-walled small vessels. (HE, $\times 100$). (B) Histopathological examination of fibroma reveals dense collagenous fibrous areas, loose edematous areas, and pseudolobular structures. (HE, $\times 100$).

Both SST and fibroma are derived from sex cord stroma, belonging to benign tumors of the ovary.^{1-3,5} SST is usually unilateral and has no hormonal symptoms.^{1,2,5} Meanwhile, fibroma also presents as a unilateral asymptomatic pelvic mass. To date, few studies have reported the simultaneous occurrence of two types of sex cord stromal tumors. Tsai *et al.* reported a case with a collision of SST and signet-ring stromal tumor of the ipsilateral ovary.³ However, in this case, tumors were observed in different sides, which was different from the previous study.³ Ovarian cystectomy, including open surgery and minimally invasive surgery, can achieve satisfactory clinical outcomes for SST and fibroma.¹⁻⁴ We used laparoscopic cystectomy to preserve the function of bilateral ovaries and minimise the damage.

In summary, the present case is remarkable because of the rarity of two similar subtype neoplasms occuring simultaneously in both-sided ovaries. SST and fibroma have a benign course and can achieve a good prognosis with enucleation or unilateral ovariotomy.

CONFLICT OF INTEREST:

The authors declared no conflict of interest.

AUTHORS' CONTRIBUTION:

SLY: Concept, design, manuscript preparation, final approval of the version to be published.

MW, XWZ, SLY: Design, literature review, manuscript preparation, drafting, and editing.

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