

A Fibroma with Cystic Change Developing in an Accessory Ovary – A Brief Case Report –

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Accessory ovaries are rare entities defined as small portions of ovarian tissue situated near, and connected to, the normally placed ovary. Tumors arising in accessory ovaries are extremely rare. In particular, a fibroma arising from an accessory ovary has not been reported in the literature. We describe such a case with a fibroma developing in an accessory ovary. A 53-year-old multiparous woman presented with abdominal pain for 2 months. Pelvic computed tomography revealed 11.0 × 8.0 × 6.0 cm sized cystic mass with a thick septal wall in right adnexa. The preoperative diagnosis was a borderline ovarian tumor. Furthermore, a laparotomy showed a cystic mass connected to the right ovary by stalk. The bilateral eutopic ovaries were completely normal. Histologically, an accessory ovary was replaced by a fibroma accompanied by extensive cystic change.

Key Words: Accessory ovary; Fibroma

Accessory ovaries are rare entities defined as small portions of ovarian tissue situated near, and connected to, the normally placed ovary.¹ Tumors arising in accessory ovaries are extremely rare. In particular, to the best of our knowledge, a fibroma arising from an accessory ovary has not been reported in the literature. We describe such a case with fibroma developing in an accessory ovary.

CASE REPORT

A 53-year-old multiparous woman presented with abdominal pain for 2 months. She did not complain of any vaginal bleeding or abdominal distension. Past medical history was unremarkable except for undergoing a caesarian section operation on two occasions about 20 years ago. Pelvic computed tomography revealed a 11.0 × 8.0 × 6.0 cm sized-lobulated cystic mass with thick septal wall in right adnexa (Fig. 1) and a 4 cm sized heterogeneously enhancing mass lesion in the uterus. The preoperative diagnosis was a borderline ovarian tumor and uterine adenomyosis. A laparotomy showed a cystic mass connected to right ovary by stalk. Bilateral eutopic ovaries appeared normal, the patient underwent a total hysterectomy with bilateral salpingo-

oophorectomy. Upon the macroscopic examination, the accessory ovary was found to weigh 250.0 g and 10.0 × 8.0 × 6.0 cm. The mass was composed of a mixed solid portion (10%) and cystic portion (90%) (Fig. 2). The uterus had a 2.3 cm-sized intramural leiomyoma. Upon histological examination, the solid portion consisted of uniform spindle stromal cells with bland nuclei arranged in a slightly storiform pattern (Fig. 3). Hyaline bands and edema were present. Cystic portion had no epithelial lining.

The patient's postoperative recovery was uneventful. The patient was discharged on the 8th postoperative day.

DISCUSSION

Accessory ovary, defined as a third ovary situated in proximity to, or having ligamentous connection with an eutopic ovary, was first described by Grohe in 1864.² A supernumerary ovary is defined as a third completely separated and with no connection to the eutopic ovary.² The incidence of an accessory ovary was reported to be very low as one in 29,000-700,000 gynecologic admission. In the embryological theories, an accessory ovary may be formed as a result of the abnormal separation of a

small part of the developing and migrating ovarian primordium. On the other hand, Lachman and Berman³ suggested that an accessory ovary should be classified as ovarian implants rather

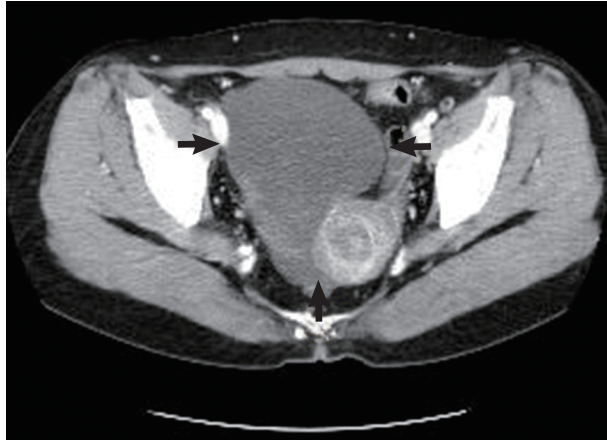


Fig. 1. A pelvic computed tomography scan shows an 11 cm-sized lobulated cystic lesion (arrows) with a focally thick wall in the right adnexa.

than true embryologically derived ectopic tissue.¹ The accessory ovarian tissue has both the functional and the pathological potentials of normal ovaries.² Any tumors arising in normal ovarian tissue can develop in an accessory ovary, although, tumors arising in an accessory ovary are extremely rare. To date,

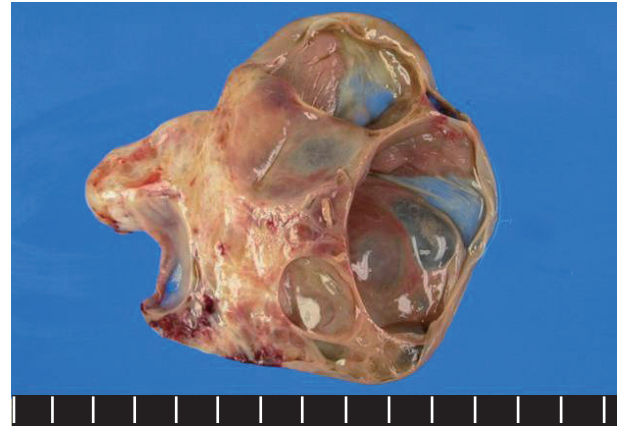


Fig. 2. The cystic mass is septate with thin to thick fibrous walls.

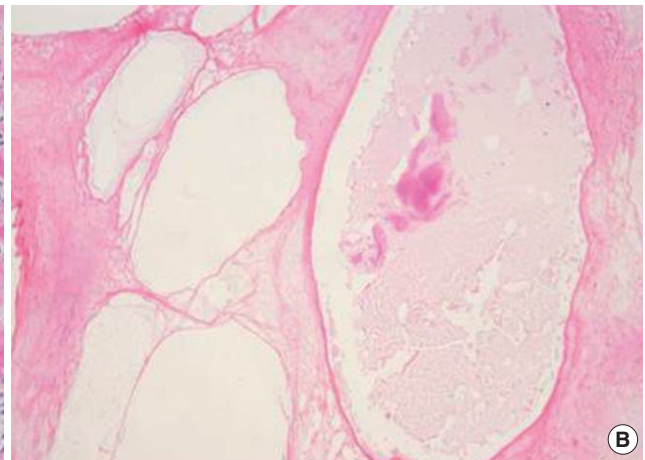
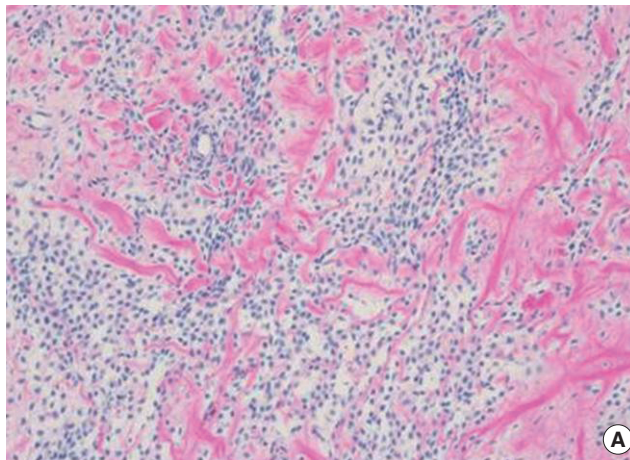


Fig. 3. A fibroma with spindle-shaped stromal cells and abundant collagen matrix (A). Extensive cystic change portion (B).

Table 1. Reported cases of tumors arising in accessory ovaries

No.	Reference	Age (yr)/Sex	Symptom	Location	Treatment	Tumor size (cm)	Diagnosis
1	Lim <i>et al.</i> ¹	33/F	LLQ pain	Left infundibulopelvic ligament	Exploratory laparotomy	2.5 × 2 × 2	Dermoid cyst
2	Andrade <i>et al.</i> ²	18/F	Hirsutism and pelvic pain	Right ovary and omentum	Laparotomy	16 × 13	Sclerosing stromal tumor
3	Sharatz <i>et al.</i> ⁴	11/F	Abdominal and left flank pain	Left fallopian tube	Left salpingectomy	18.7 × 10 × 15.4	Giant serous cystadenoma
4	Roth <i>et al.</i> ⁶	29/F	Abdominal pain and cramping	Right broad ligament	TAH/RSO/omentectomy	21 × 16 × 9	Steroid cell tumor
5	Liu <i>et al.</i> ⁷	30/F	Virilizing symptoms	Infundibulum of right fallopian tube	Laparotomy	2 × 3 × 3	Steroid cell tumor
6	Heller <i>et al.</i> ⁵	43/F	Abdominal distention and stress incontinence	Right paratubal area	H/RSO/LS	1.1	Brenner tumor

F, female; LLQ, left lower quadrant.

there have been only a few reports of tumors arising in accessory ovaries; examples of these are cystic mature teratomas,¹ serous cystadenomas,⁴ mucinous cystadenomas, Brenner tumor,⁵ steroid cell tumor,^{6,7} and sclerosing stromal tumor² (Table 1). A case of a large fibroma arising in supernumerary ovary has been reported,⁸ to our knowledge, the occurrence of a fibroma in an accessory ovary has not yet been reported.

A fibroma is a common ovarian tumor, occurring almost invariably after puberty and histologically characterized by closely packed spindle stromal cells arranged in a "feather stitched" or storiform pattern. Hyaline bands and edema may be present. The average diameter of fibroma is 6 cm. Myxoid changes may be seen, sometimes resulting in cystic degeneration.

Our case shows the typical histologic features of a fibroma and stromal cells arranged in slightly storiform pattern with extensive cystic change.

In summary, an accessory ovary is a rare condition having the same functional and pathological potency of a normal ovary. Herein, we report the first case of a fibroma arising in an accessory ovary.

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