

A rare case of bilateral pelvic mass

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Abstract

A case of 69-year-old woman with large pelvic mass and ascites is reported in this paper. With the exception of mild pelvic pain and a Pelvic mass in pelvic, she had no symptom or sign. All routine and hormonal Lab tests and tumor marker's were normal. The MRI revealed a large mass in anterosuperior of uterus, and left ovary was situated in neighborhood of pelvic mass. Her Uterus normal, with a small cyst in the right ovary. The total abdominal hysterectomy and bilateral salpingo-oophorectomy revealed a large cream solid mass (16×8× 8 Cm, 1260 gr) in the left ovary. Nonetheless the right ovary had normal appearance with a cyst (3×2.5Cm). There was some free fluid in the pelvic cavity. The ovarian mass was identified as fibrothecoma, the right ovarian cyst as serous cystadenoma, but no malignant cells found in free fluid. This case had interesting features, because first clinical features suggested a bilateral malignancy in pelvic, but she had two different tumors which were benign. Also, the occurrence of bilateral fibrothecoma and serous cystadenoma were rare. Furthermore, we did find no similar case in the literature.

Keywords: Serous tumors, fibrothecoma, bilateral ovarian tumors, pelvic mass.

Case presentation

The 69-year-old woman was referred to the gynecologic oncology clinic Firoozgar general hospital due to a pelvic mass. She visited her gynecologist two months ago, because she suffered from a pelvic pain. Her gynecologist performed a pelvic examination that revealed a large pelvic mass.

The patient lost 3 to 4 kilograms weight during the past year that was attributed to her diet. She had noticed no changes in abdominal girth, in bowel or bladder functions, leg swelling, urinary urgency, and dysuria. Spontaneous

menopause had occurred approximately 35 years earlier. She had hypertension which was controlled with atenolol, and diabetes mellitus which managed by diet and metformin. Physical examinations were normal with the exception of mild tenderness in the right lower quadrant. On pelvic examination, the external genitalia, vagina and cervix were normal. The rectovaginal examination disclosed a globular anterior pelvic mass extending from left to the right of pelvic. The result of rectal examination was normal, and stool test negative for guaiac.

A pelvic transvaginal ultrasonogram showed an echogenic mass (163×85mm) with calcifi-

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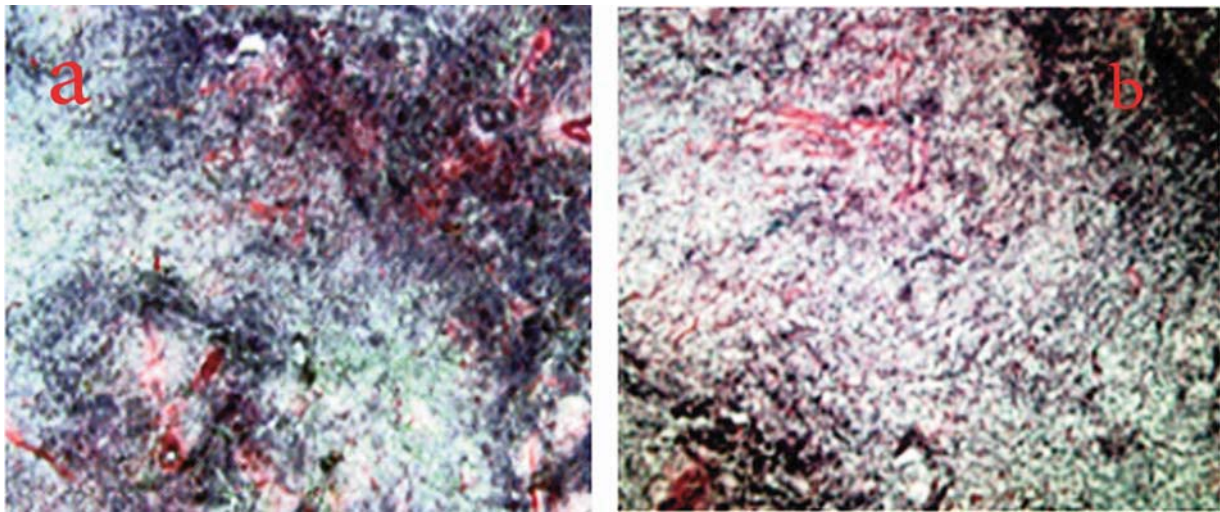


Fig. 1. Histologic section shows fibrothecoma in left pelvic mass.

cation in anterosuperior of uterus, and the left ovary was on the left side of the mass. Right ovary was large with anechoic cyst, and some free fluid in posterior cul-de-sac was detected. These findings suggested a bilateral pelvic tumor (probably malignant), and confirmed by MRI. The MRI of the pelvis revealed a mixed signal for multicomponent large mass in anterosuperior of the uterus with an extension from left to the right site of the pelvic cavity. The left ovary was situated in close proximity of the pelvic mass. A cystic area (3×2.5cm) in the right ovary was also present, but no omental

implants or lymphadenopathy were seen.

Before operation routine lab tests, EKG and chest X-Ray performed that the results were normal. Also the routine tumor markers (serum CA 125 and alpha fetoproteine) checked that the results were normal. Total abdominal hysterectomy and bilateral salpingo-oophorectomy were performed. The uterus was atrophic, and the large pelvic mass (16×8×8cm in size, 1260gr in weight) was solid and cream with smooth surface, and no adhesion were present. Except a cystic area (3×2.5cm), the right ovary had a normal appearance.

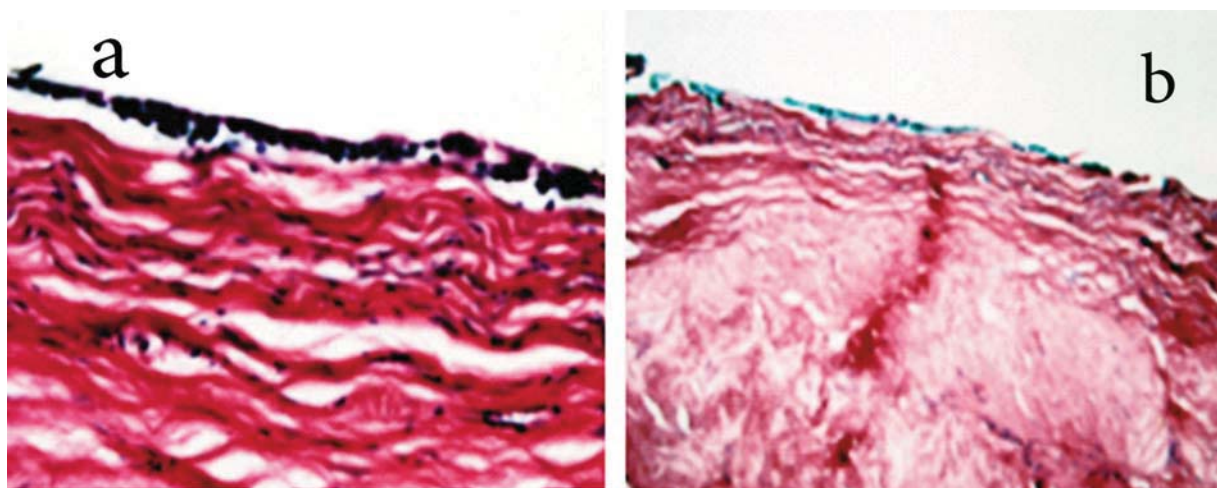


Fig. 2. Histologic section in right ovary shows serouscystadenoma

After operation the patient recovered quickly. In the histopathology report, the left ovarian mass was identified as fibrothecoma (Fig.1), and the sample of the right ovarian cyst as serous cystadenoma (Fig.2). There were no malignant cells in free fluid.

Discussion

Fibroma and fibrothecoma represent approximately 4% of all ovarian tumors and 50% of sex cord stromal tumors [1]. They are occasionally (5%) bilateral, with peak age incidence of approximately 50 years [1]. The early symptoms are pelvic pain and abnormal uterine bleeding [4,5]. Patients with large tumors or ascites are admitted with compression symptoms or abdominal distension [4,5]. Approximately 20% are associated with marked ascites and small proportion also possess pleural effusion [1]. Fibrothecoma are often hormonally active. Thus, the latter can be associated with endometrial hormonal stimulation. Ultrasonography showed a solid uniformly hypoechogenic mass, with a very marked sound attenuation. On MRI, fibroma and fibrothecoma in comparison with skeletal muscle have edema and cystic degeneration which can be present in hyperintense, especially in large lesion. On gadolinium-enhanced images, they may demonstrate mild enhancement. Calcifications (hypointense foci) may also be present. Microscopically, they are composed of fibroblasts and interspersed theca cell [5].

Serous tumors represent approximately 22.5% of all ovarian tumors. 65% of serous tumors are generally benign, but 5% to 10% have borderline malignant potential and 20% to 25% are malignant. A frozen section is necessary to distinguish between benign, borderline and malignant serous tumors, because this distinction cannot be made on gross examination alone. Pelvic findings in patients with benign and malignant tumors can be different. Masses which are unilateral, cystic mobile and smooth are most likely to be benign, whereas those that are

bilateral, solid, fixed, irregular and associated with ascites, cul-de-sac nodules and rapid rate of growth are more likely to be malignant. Ovarian masses in women of reproductive ages are most likely benign, but the possibility of malignancy must be considered among older women [3].

Conclusion

This case had interesting features, because in initial examination she had massive bilateral ovarian tumors associated with ascites, weight loss, pelvic pain and old age, but after operation two different tumors which both benign were characterized.

Moreover, simultaneous occurrence of both fibrothecoma and serous cystadenoma is rare and we did not find similar case in the literature.

References

1. James RS, Philip JD, Charles BH, William NS. Danforth's Obstetrics and Gynecology. 11th edition. Philadelphia: Lippincott Williams & Wilkins; 2008. Chapter 52.
2. John RH, Charles FL, Robert CG. CT and MR imaging of the whole body. 4th ed. NJ: Mosby; 2003. pp. 1776-1790
3. Jonathan S. Berek & Novak's Gynecology. 14th ed. Philadelphia: Lippincott Williams & Wilkins; 2007. pp. 247-311.
4. Târcoveanu E, Niculescu D, Bradea C, Dimofte G, Vasilescu A, Ferariu D, et al. Incidence and management of the ovarian fibroma and thecoma. Experience of The First Surgical Clinic Iași. *Chirurgia (Bucap)* 2006; 101(3):325-30
5. Nocito AL, Sarancone S, Bacchi C, Tellez T. Ovarian thecoma: clinicopathological analysis of 50 cases. *Ann Diagn Pathol* 2008;12(1):12-6. Epub 2007. Oct 3.
6. Vinay Kumar, Abul KA, Nelson F, Richard NM. Robbins Basic Pathology. 8th ed. Philadelphia: Saunders; 2007. Chapter 19.
7. Dietel M, Hauptmann S. Serous tumors of low malignant potential of the ovary. 1. Diagnostic pathology. *Virchows Arch* 2000;436(5):403-12.
8. Trimble CL, Trimble EL. Management of epithelial ovarian tumors of low malignant potential. *Gynecol Oncol* 1994 Dec;55(3 Pt 2):S52-61.
9. Longacre TA, Kempson RL, Hendrickson MR.

Well-differentiated serous neoplasms of the ovary. *Pathology (Phila)* 1993;1(2):255-306.

10. Roth LM. Recent advances in the pathology and classification of ovarian sex cord-stromal tumors. *Int J Gynecol Pathol* 2006 Jul;25(3):199-215.

11. Jung SE, Lee JM, Rha SE, Byun JY, Jung JI, Hahn ST. CT and MR imaging of ovarian tumors with emphasis on differential diagnosis. *Radiographics* 2002;22(6):1305-25.

12. Bridgewater JA, Rustin GJ. Management of non-epithelial ovarian tumours. *Oncology* 1999;57(2):89-98.

13. Sfar E, Ben Ammar K, Mahjoub S, Zine S, Kchir N, Chelli H, Khrouf M, Chelli M. Anatomico-clinical characteristics of ovarian fibrothelial tumors. 19 cases over 12 years: 1981-1992. *Rev Fr Gynecol Obstet* 1994 Jun;89(6):315-21.

14. Young RH, Clement PB, Scully RE. Calcified thecomas in young women. A report of four cases. *Int J Gynecol Pathol* 1988;7(4):343-50.

15. Young RH, Scully RE. Ovarian sex cord-stromal tumors. Problems in differential diagnosis. *Pathol Annu* 1988;23 Pt 1:237-96.

16. Fox H. Sex cord-stromal tumours of the ovary. *J Pathol* 1985 Feb;145(2):127-48.

17. Young RH, Scully RE. Ovarian sex cord-stromal tumours: recent advances and current status. *Clin Obstet Gynaecol* 1984 Apr;11(1):93-134.

18. Young RH, Scully RE. Ovarian sex cord-stromal tumors: recent progress. *Int J Gynecol Pathol* 1982;1(1):101-23.