



Histopathological Diagnosis of Ovarian Fibroma: A Rare Case Report

Authors

Ajit Singh¹, Surendra Prakash Vyas², Neelu Gupta³

¹Resident Doctor ^{2,3}Professor

Department of Pathology, Sardar Patel Medical College, Bikaner

INTRODUCTION

In the WHO histopathological classification of tumors of the ovary, fibroma is classified under the sex cord - stromal tumors. Ovarian fibroma is almost always benign in. They are rare in women under 20 years of age, occur usually in women above 30 years. Ovarian tumors in childhood and adolescence are also rare, accounting for approximately 1% of all malignant neoplasms in the age range of 0-17 yrs. The tumor belongs to the same histopathologic spectrum as an ovarian thecoma/ ovarian fibrothecoma.

CASE HISTORY

A 50 yr old female patient presented with frequency of micturition and distension of abdomen since 6 months. The patient attained menarche at the age of 14 years, regular periods 3-4/30 days, scanty flow. Systemic examination of CVS, CNS, Respiratory systems were normal, abdomen was distended. USG abdomen showed large heterogeneously enhancing mass (10.28x18 cm) in pelvis and abdomen. There was no free fluid in the abdomen. No pleural effusion was noted. Salpingo-oophorectomy was done and we received a soft tissue mass measuring 10.28x18 x8 cm. On gross examination, the surface was

smooth with fallopian tube attached to the mass and the capsule was not adherent to it. It was rubbery in consistency. Cut surface showed lobulated grey white areas with whorled pattern.

Microscopy revealed variably cellular bundles and intersecting swathes of collagenous fibrous tissue. The fibroblastic cells were arranged in storiform pattern having spindle shaped nuclei and luteinized areas were seen.

DISCUSSION

An ovarian fibroma is a benign stromal tumor composed of spindle, oval or round cells producing collagen. Ovarian fibromas account for approximately 4% of all ovarian neoplasms^{2,3}. They are rare in women under 20 years of age and occur usually in women above 30 years. They are bilateral in about 5% of cases. The size ranges vary from few millimeters to >20cm.

Fibromas are usually solid, spherical, slightly lobulated, encapsulated, grey-white masses covered by a glistening intact ovarian serosa. Tumour is composed of spindle shaped cells forming variable amounts of collagen. Sectioning of a fibroma typically reveals a chalky-white surface that has a whorled appearance (Fig.1), similar to that of a uterine fibroid. Areas of

oedema, occasionally with cyst formation, are also relatively common.



Fig. 1. Gross appearance of ovarian fibroma

tumor because of the difficulties in diagnosis. This tumor is often misdiagnosed as a uterine myoma in ultrasonographic findings and is sometimes mistaken for a malignant tumor of the ovary, because of its solid nature, increased tumor marker levels, and accompanying ascites. However, ovarian fibromas are benign and can be treated completely by surgical removal, and laparoscopic surgery can be an effective and safe alternative approach.

REFERENCES

1. Tavassoli FA, Mooney E, Gersell DJ, et al. Sex-Cord Stromal Tumors In: World Health Organisation Classification of Tumors, Pathology and Genetics of Tumors of the Breast and Female Genital Organs. Lyon, France: IARC Press; 2003, 149-51.
2. Jeong YY, Outwater EK, Kang HK, Imaging evaluation of ovarian masses, Radiographics, 20 (5): 1445-70.
3. Atri M, Nazarnia S, Bret PM et-al. Endovaginal sonographic appearance of benign ovarian masses, Radiographics, 1994; 14 (4): 747-60.

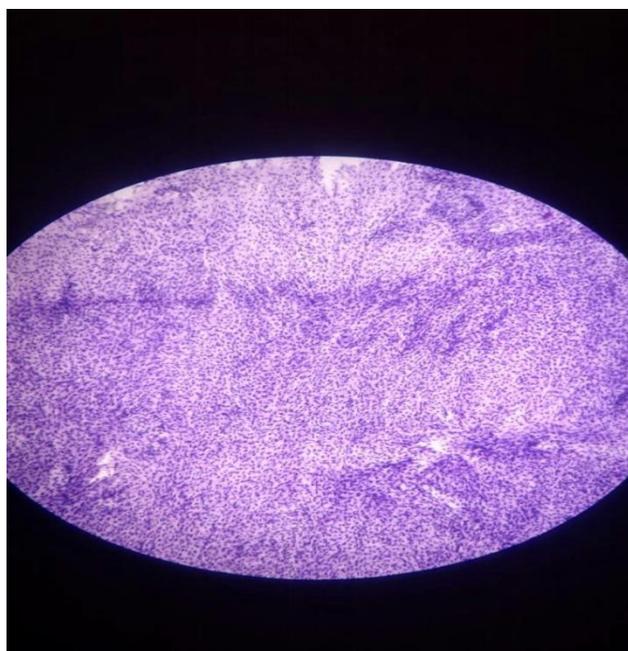


Figure 2: Photomicrograph of ovarian fibroma revealed cytologically bland spindled cells forming vague storiform pattern, 10x view, H&E Stain.

CONCLUSION

Ovarian fibromas are uncommon but are the most common benign solid tumors of the ovary. They constitute about 4% of all ovarian tumors. Gynecologists should be aware of this type of