CASE REPORT

A Fibrothecoma of the Ovary with Proliferative Endometrium in Postmenopause Women with Chronic Kidney Disease: A Rare Case Report!

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Received on: 14 December 2022; *Accepted on*: 01 February 2023; *Published on*: 11 May 2023

Abstract

Ovarian fibrothecomas are ovarian stromal tumors that can appear in a variety of clinical circumstances.

Aim: In postmenopausal bleeding women, the study's goal is to determine the prevalence, diagnosis, therapeutic needs, and histological characteristics of ovarian fibromas and fibrothecomas.

Case description: We present a case of ovarian fibrothecoma with postmenopausal bleeding and abdominal distension in a 64-year-old female with chronic renal disease, measuring 84.96 pg/mL serum testosterone and 18.5 ng/dL serum inhibin-B. A multiseptated cystic lesion measuring 3.6 × 2.4 cm with thin internal septae emerging from the right ovary is shown on MRI pelvis. Total abdominal hysterectomy was performed, as well as bilateral salpingo-oopherectomy.

Conclusion: Ovarian fibrothecoma is a rather uncommon condition. The preferred treatment for postmenopausal women is surgical excision, which has an excellent prognosis. In our case, ovarian fibrothecoma with thickened proliferative endometrium, raised CA-125 level, and increased inhibin-B and serum testosterone levels mislead us to the diagnosis as malignancy. This case report represents the possibility of occurrence of benign ovarian tumors with clinical pictures of postmenopausal bleeding and to be wide enough to rule out benign causes.

Keywords: Dilatation, Evacuation, Fibrothecoma, Ovarian.

Journal of South Asian Federation of Obstetrics and Gynaecology (2023): 10.5005/jp-journals-10006-2210

Introduction

Ovarian fibrothecomas are rare benign sex-cord stromal tumors occurring in perimenopausal and postmenopausal women. It represents an ovarian stromal neoplasm developing in a wide spectrum of clinical settings.[1] Both thecoma and fibroma of the ovary are included in stromal tumors of the ovary.[2] They are most common in adult women, with ~66% in postmenopausal women. Although they account for ~1% of all ovarian tumors, they are the most common benign solid ovarian tumor. It represents <2% of pediatric ovarian tumors.[3] Thecomas are histologically composed of lipid-containing cells that resemble theca interna cells. Fibromas are composed entirely or almost entirely of spindle, oval, or round cells forming variable amounts of collagen.[4] The differentiation between thecomas and fibromas is occasionally imprecise because of the histological and immunohistochemical overlap between them. Therefore, the term "fibrothecoma" has been frequently used. Here, we present an unusual clinical manifestation of ovarian fibrothecoma with abdominal distension with deranged renal function in a postmenopausal female.[5]

Case Description

A 64-year-old postmenopausal woman came to OPD with a complaint of bleeding per vaginum for 15 days. The patient had a similar episode 6 months back and stopped after taking medication. The patient had complaint of bloating sensation and was unable to have solid food associated with nausea and vomiting. She attained menopause 10 years back. There was no history of intake of hormone replacement therapy. She was para two with all vaginal deliveries. Sterilization was not done. The patient is a known case of diabetic on insulin for the past 10 years, systemic hypertension on antihypertensives for the past 2 years. The patient had H/O chronic kidney disease, who is on sodium bicarbonate 500 mg thrice daily for 1 year. There was no surgical intervention in the past. The patient had no history of malignancy running in the family. General examination – The patient had male types of hair distribution over the face with frontal alopecia. Systemic examination was normal. Local examination – P/S: cervix and vagina healthy, no discharge or bleeding pv. P/V: cervix pointed downward, uterus anteverted, just bulky mobile nontender, and suprapubic tenderness was present. Bilateral fornices free and nontender.

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How to cite this article: Ethirajan S, Mohamed Ariff N, Kamalakannan VV, A Fibrothecoma of the Ovary with Proliferative Endometrium in Postmenopause Women with Chronic Kidney Disease: A Rare Case Report! J South Asian Feder Obst Gynae 2023;15(2):259–261.

Source of support: Nil

Conflict of interest: None

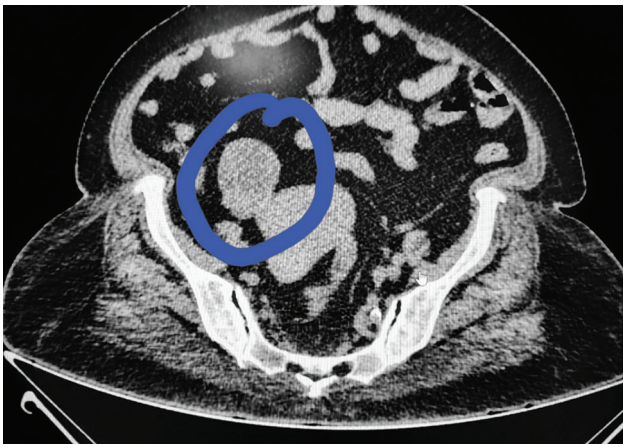

Fig. 1: Intraoperative – 4 × 3 cm right ovarian firm mass with bulky uterus multiple small fibroids

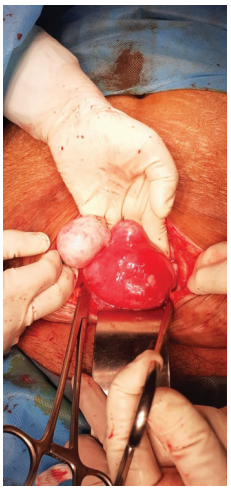

Fig. 2: Cut section of the specimen – showing fluffy-like material filled in the uterine cavity with multiple small (2 × 3 cm) intramural fibroids

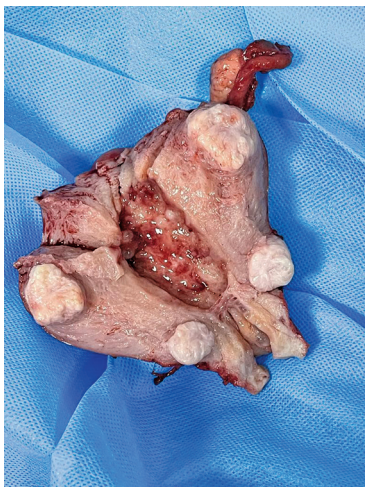

Fig. 3: Histology – fibrothecoma of the ovary showing bland spindle cells – cellular spindle cell neoplasm. Round and bland spindle cells with luteinized theca-like cells. No evidence of malignancy noted

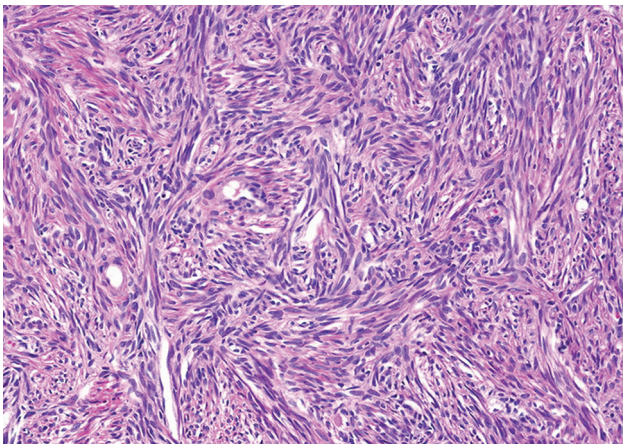

Fig. 4: MRI abdomen and pelvis – showing a multiseptated cystic lesion ~3.6 × 2.4 cm with thin internal septae noted arising from right ovary – minimally complex right ovarian benign/ borderline cyst

Preoperative Workup

Pap smear – negative for malignancy.

Endometrial biopsy – revealed proliferative endometrium.

USG findings – uterus 9 × 5.6 × 6.8 cm, endometrial thickness – 14 mm, anterior myometrial[2] fibroids largest measuring 3 × 2.5 cm. Right cystic lesion of size 4.5 × 4.2 cm with internal septations and solid components noted vascularity present. No evidence of calcifications.

Endometrial aspiration done was found to be a disordered proliferative phase with chronic cervicitis.

MRI abdomen and pelvis findings – Bulky uterus (10 × 8.3 × 5.6 cm) with multiple fibroids – anterior and posterior myometrium – 2.4 × 2.8 cm, another subserosal fibroid – 2.1 × 2.6 cm, endometrial thickness 11 mm (thickened endometrium). The right ovary measures 4.2 × 4.2 × 4.7 cm, volume – 41 cc. A multiseptated cystic lesion – 3.6 × 2.4 cm with thin internal septae noted arising from the right ovary – minimally complex right ovarian benign/borderline cyst (Fig. 1). Tumor markers were done.

RMI score – 222 (moderate risk).

Discussion

Stromal tumors of the ovary include thecoma and fibroma, yet as differentiation between these two types may be difficult, the term "fibrothecoma" has emerged in recognition of the similar immunohistochemical features present in both.[6] Here, we present an unusual clinical manifestation of ovarian fibrothecoma with abdominal distension in a postmenopausal female with chronic kidney disease. Elevated serum inhibin B and serum testosterone levels contribute to the diagnosis toward sex-cord stromal tumor. An atypical USG finding may be mistaken for malignancy among postmenopausal age group. Macroscopic findings: 5 × 4.5 × 1.5 cm. Smooth, focal nodularity present. Cut section: thickened, uniloculated cyst with smooth inner surface. Microscopic features of round and bland spindle cells with luteinized theca-like cells. No evidence of malignancy noted (Figs 2 and 3).[7,8]

Conclusion

Ovarian fibrothecoma is a rare occurrence. Ovarian fibrothecoma should be considered in women presenting with postmenopausal

bleeding, pelvic pain, and a large pelvic mass. Radical surgical excision is the preferred treatment for postmenopausal women and is associated with good prognosis. However, occurrence of ovarian tumor in women presenting with postmenopausal genital bleeding and endometrial thickening on sonography raises the suspicion of estrogen secretion by the ovarian tumor. In our case, ovarian fibrothecoma with thickened proliferative endometrium, raised CA-125 level, and increased inhibin-B and serum testosterone levels mislead us to the diagnosis as malignancy. This case report represents the possibility of occurrence of benign ovarian tumor with clinical pictures of postmenopausal bleeding and is wide enough to rule out benign causes (Fig. 4).

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