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### **Case Report**

## Giant Fibrothecoma of the Ovary in a Young Patient a Case Report

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#### ABSTRACT

Fibrothecomas are benign ovarian stromal tumors, they are rare tumors of gonadal stromal cell origin that represent 3-4% of all ovarian tumors. It commonly occurs in post-menopausal women. The clinical presentation is often nonspecific, whereas patients more frequently present with a pelvic mass, metrorrhagia, and pelvic pain.

We present a 35-year-old patient, nulli-pregnant, with no personal or family pathological history, who attended a medical consultation for presenting progressive abdominal distention of 6 months of evolution in addition to abdominal pain in the last 2 months type colic which increased during her menstrual periods concomitantly alteration in your defecatory habits. Abdominal ultrasound was performed, finding a solid intrapelvic mass of approximately 14x10x10 cm in diameter of probable left ovarian origin, free fluid in the Douglas space, compression and displacement of intestinal loops and bladder. The patient underwent surgery and an exploratory laparotomy was performed, finding a pelvic tumor adhered to the tube and left ovary, in addition to ascites fluid in the abdominal cavity, complete resection of the tumor, ovary and left salpingue was performed.

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#### Abstract

Fibrothecomas are benign tumors of the ovarian stroma, they are rare tumors of gonadal stromal cell origin that account for 3-4% of all ovarian tumors. It commonly occurs in post-menopausal women. The clinical presentation is often nonspecific, while patients most often present with pelvic mass, metrorrhagia, and pelvic pain.

We present a patient of 35 years, nuligesta, without personal or family pathological history who goes to a medical consultation for presenting progressive abdominal distention of 6 months of evolution in addition to abdominal pain in the last 2 months type colic which increased during their menstrual periods concomitantly alteration in their defecatory habits. Abdominal ultrasound was performed finding intrapelvic solid mass of approximately 14x10x10 cm in diameter of probable left ovarian origin, free fluid in the Douglas space, compression and displacement of intestinal loops and bladder. The patient underwent surgery performing exploratory laparotomy finding pelvic tumor attached to the tube and left ovary, in addition to ascetic fluid in the abdominal cavity, complete resection of tumor, ovary and left salpingue was performed.

#### Introduction

Fibrothecomas are benign ovarian stromal tumors, rare tumors of gonadal stromal cell origin that represent 3-4% of all ovarian

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tumors [1-3]. They represent 1% to 4.7% of ovarian tumors of all ovarian neoplasms [1,4,5]. Fibrothecomas are usually benign, unilateral, and commonly occur in old age. In postmenopausal women with an incidence between 50 and 55 years of age [4].

Fibroma and thecoma can have significant morphological overlap. They can present as pure forms or a mixture of the previous ones, which is why their histological pattern is so variable on histopathological examination and their diagnosis is difficult in some cases [6]. Fibrothecomas differ slightly from fibromas; they have sheets and nests of plump spindle cells with lipid-rich cytoplasm (theca-like cells) on a background of soft fibroma spindle cells [2]. The vast majority of fibrothecomas behave benignly, and malignant variants are extremely rare. Occasional cases of malignant thecoma have been reported [7].

About 70% of tumors are hormone secreting. The most common presentation in the premenopausal and menopausal age group is abnormal uterine bleeding (53.7%). Or it could present as postmenopausal bleeding (27.5%), heavy or irregular menstruation (26.2%), or amenorrhea [4].

An accurate preoperative diagnosis is often difficult due to its rare occurrence. Fibrothecomas are stromal tumors that contain cells loaded with lipids similar to those of theca interna and may have some degree of fibroblasts. If the tumors cannot be differentiated between fibroma and thecoma, they are called fibrothecoma. An ovarian fibrothecoma can be associated with ascites and Citation: Martínez-Rodas O and Bonilla-Lanza NA (2021) Giant Fibrothecoma of the Ovary in a Young Patient a Case Report. Journal of Gynecology Research Reviews & Reports. SRC/JGRRR-156. DOI: doi.org/10.47363/JGRRR/2021(3)142

hydrothorax, known as Meigs syndrome. Treatment is surgery and follow-up is essential until complete recovery [8].

#### **Presentation of the Case**

This is a 35-year-old patient, nulli-pregnant, with no personal or family pathological history, who attended a medical consultation due to progressive abdominal distention of 6 months of evolution in addition to abdominal pain in the last 2 months, colic type which increased during his menstrual periods concomitantly alteration in their defecatory habits, decreasing their frequency. Physical examination in the abdomen revealed decreased bowel sounds and a well-defined palpable mass on the left flank with regular borders, painful on deep palpation, movable dullness, and a positive ascites wave. Abdominal ultrasound was performed, finding a solid intrapelvic mass of approximately 14x10x10 cm in diameter of probable left ovarian origin, free fluid in the Douglas space, compression and displacement of intestinal loops and bladder. Hematic biometry, blood chemistry and tumor markers within normal parameters, CA 125: 9.48, AFP: 1.2, CEA: 0.55, CA 19-9: 17. The patient underwent surgery, performing exploratory laparotomy, finding a left ovarian tumor adhered to the tube of Fallopium measuring 18x11x9 cm, weight 800 gr, in addition to ascitic fluid in the abdominal cavity, a complete resection of the tumor, and ovary and left salpinx was performed. The pathological report reported a stromal tumor of the sexual cord (fibrothecoma), a left ovary with a recent hemorrhagic corpus luteum, uterine tube within normal histological limits, and negative ascites fluid due to neoplastic cells. The patient was discharged 48 hours after surgery with a favorable postoperative evolution without complications. 10 months after her procedure, she did not show signs of disease recurrence.



Intrapelvic Solid Mass of 14x10x10 cm



Free liquid in Douglas Cul-de-Sac



Fibrothecoma of the Left Ovary Attached to the Fallopian Tube

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#### Discussion

Fibrothecoma as such is considered an ovarian stromal tumor with differentiation into theca or trophoblastic cells [6]. The name of fibrothecoma because the theca cells of the normal ovary have more of the characteristic of the elements of the connective tissue [9,10]. They can be pure and non-secretory or associated with elements of the stroma, sometimes responsible for estrogen secretion. They are composed of round, oval or spindle cells that form variable amounts of collagen; Due to this, the tumor has a whorled white appearance that resembles uterine leiomyoma on gross examination [5,8,10].

Fibrothecomas occur predominantly in older postmenopausal women [1,6,11]. In our case, it is a 35-year-old patient; which is less frequent. There are very few publications about these tumors at this age. The clinical presentation is often nonspecific, while patients more frequently present with a pelvic mass, metrorrhagia, pelvic-abdominal distention, and pelvic pain. The clinical examination generally finds a solid, mobile tumor with a regular surface and variable size [1,7,8]. Torsion is not an uncommon presentation, it occurs in 8% of patients [1,8]. About 10-15% of ovarian fibrothecomas can be combined with ascites; less than 1% are combined with ascites and hydrothorax causing Meigs syndrome and elevated levels of CA 125 [2,4,12,13]. However, high serum levels of CA 125 can be detected initially, and become normal after tumor removal; it is probably misdiagnosed as a malignancy [4,8,14]. In the clinical presentation of our patient, ascites was found, without presenting hydrothorax or elevated CA 125 levels. Fibrothecomas may also be associated with basal cell nevus syndrome (Gorlin-Goltz), which consists of multinodular ovarian fibromas bilateral large, multiple basal cell carcinomas of the skin, odontogenic keratocysts, and other abnormalities [2]. Some ovarian thecoma can be hormonally active and show estrogenic activity such as menstrual irregularities, amenorrhea, endometrial hyperplasia, and endometrial carcinoma [14].

The size varies from small tumors to giant tumors that can even be palpated on physical examination, they are solid tumors, firm when cut with variable lipid content from patient to patient, they are mostly unilateral and few tend to become malignant [6].

The preoperative diagnostic rate of ovarian granulosa cell tumors is quite low due to their low incidence, various clinical syndromes, and large differences in tumor size, shape, and internal components [4]. Therefore, it is often misdiagnosed as a uterine fibroid. Ultrasound is generally used as the first-line imaging technique for the evaluation of ovarian pathological abnormalities. However, the sonographic characteristics of fibroids and fibrothecomas are usually nonspecific, and magnetic resonance imaging is often necessary for further differentiation [2,3].

The treatment of these tumors is surgical, with complete resection of the tumor with or without a uterus and adnexa depending on the age of the patient and the infiltration of said structures [6]. The treatment modality could be tumor excision alone, unilateral or bilateral salpingo-oophorectomy with or without hysterectomy depending on the patient's condition and the aggressiveness of the tumor [4]. In our case, the patient underwent complete resection of the tumor, ovary, and left salpinx.

Recurrence is rare, which is also evidenced in its extraovarian presentation. In our case, the patient 10 months after her procedure did not show signs of disease recurrence. In conclusion, ovarian fibrothecomas are extremely rare neoplasms of childbearing age, which appear to be derived from ectopic gonadal tissues or their differentiation by primitive mesenchymal cells. Its adequate study by means of a correct clinical, morphological and immunophenotypic correlation, allows its recognition among the wide number of different differential diagnoses [15].

#### **Conflict of Interests**

The authors declare that they have no conflict of interest with the publication of this article.

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