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RESEARCH ARTICLE

OVARIAN FIBROMA: A CASE REPORT

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Abstract

Ovarian fibroma is a pathological variant of ovarian fibrothecomas. They are very rare tumors, mostly seen following menopause. Their diagnosis may be enabled by clinical symptoms and ultrasonography, then supplemented by magnetic resonance imaging. The histological study confirms the diagnosis and surgical resection is the preferred management strategy for these tumors. Here, we describe a case of a unilateral ovarian fibroma in a 19 years old patient.

Introduction:-

Fibromas are the most common tumors of the female genital tract, specifically, the uterus. They affect 20 to 25% of reproductive women. The ectopic location, whose pathophysiology is not well clarified, is rare. The ovarian location of the fibroma is very rare and mostly seen following menopause. When associated with peritoneal effusion on clinical examination and radiological investigations in addition to the elevation of CA125 marker, it could be a sign of the malignant ovarian tumors. Histopathology establishes the diagnosis and the Treatment is surgical.

Presentation of case:

S.I. is a 19 years old patient who has never been pregnant anddoes not have a remarkable medical history. She has presented with an increase of abdominal volume without associated symptoms.Particularly, pelvic pain, or compression signs. The Abdominal examination revealed a well limited and mobile hard mass ranging from the hypogastric region to the xiphoid appendix. The Gynaecological examination was not performed (the patient stated that she is a virgin) and the mass was separated from the uterus on rectal examination. The Abdominal ultrasonography revealed a normal-sized uterus with regular outlines.The interface line can be seen entirely, the myometrial wall is homogeneous, a heterogeneous echogenic extra and right latero-uterine tissue mass of 20x15cm without signs in colour Doppler, the left ovary is normal-sized, and a low abundant effusion in the Douglas cul-de-sac.

The Abdominal pelvic magnetic resonance imaging (MRI) revealed a hugeovoid well-defined abdominal pelvic mass, characterized by a T2 heterogeneous hyperintense signal and T1 intermediate signal, which was early enhanced, intense and heterogeneous after the injection of gadolinium, it had no septum, measured 155x103mm in cross-section and 165mm in height, and developed in the right ovary independently of the uterus, the left ovary is normal, the MRI also showed a liquid effusion blade in the Douglascul-de-sac (figure1,2). CA125 was negative.

The patient underwent a laparotomy, whichrevealedat exploration: a low abundant peritoneal effusion aspirated for cytological study, a solid smooth-walled cystic mass measuring 17x15x10 cm at the expense of the right ovary, the

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left adnexa wasof normal aspect, and the uterus of normal size. The rest of the abdominal pelvic cavity was within normal limits. A right adnexectomy was performed followed by an extemporaneous examination showing a fusocellular proliferation which benign or malignant nature required an immunohistochemical study. Multiple biopsies were taken afterwards. The definitive anatomopathological and immunohistochemical result revealed a fibroma of the right ovary. The biopsy of the left ovary, the rest of the peritoneal and epiploon biopsies,as well as the cytology of the peritoneal effusion were normal. The postoperative course was uneventful. The patient is well and asymptomatic three months after surgery.

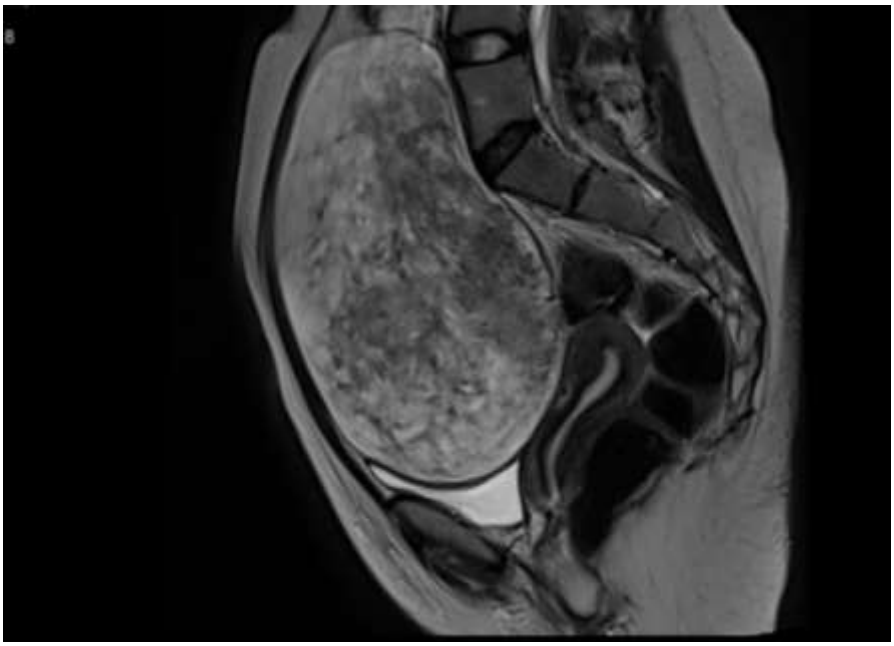

Figure 1:- sagittal Abdominal pelvic MRI showing heterogeneous T2 hyperintense,ovoid, well-defined, and alarge abdominal pelvic mass,measuring 165mm in height independent of the uterus.

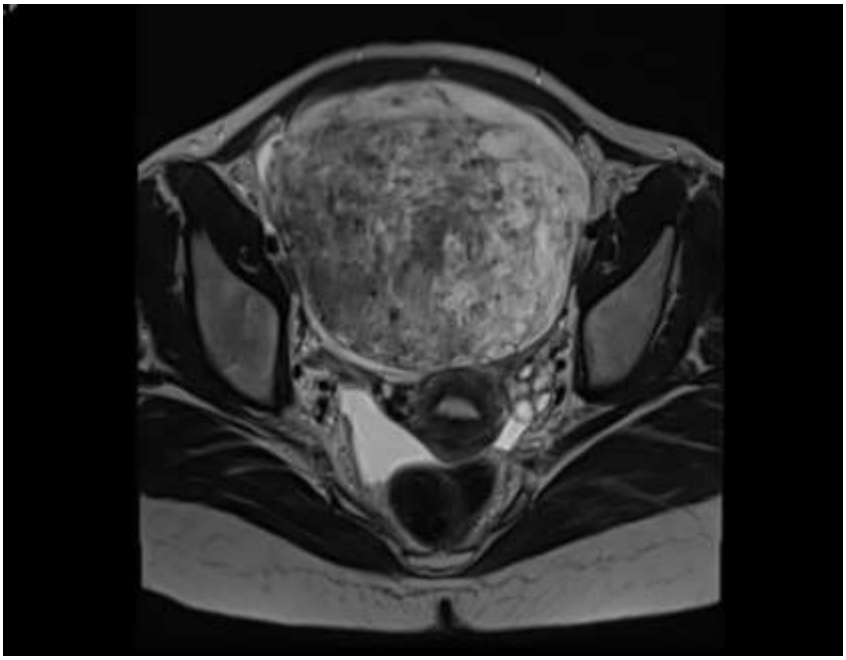

Figure 2:- Abdominal pelvic MRI cross-section: heterogeneous T2 hyperintense, ovoid, well-defined, And a large abdominal pelvic mass, measuring 155x103mm, at the expense of the right ovary. The left ovary is normal.

Discussion:-

Fibrothecomas are stromal tumors of the ovary that contains fusiform conjunctive cells, thecal cells, or both [1]. Ovarian fibromas are a pathological variety of fibrothecal tumors. They are mostcommonly unilateral, except when they are part of a Gorlin-Goltz syndrome. Their macroscopic description is close to that of uterine fibromas: firm white in cross-section and sometimes calcified. Fibroblast cells produce collagen, but when they contain lipids, they are called fibrothecomas [2]. These tumors occur generally in postmenopausal or perimenopausal women [2], our patient was 19 years old. Studies have reported that 75% of the patients were 40 years old and 50% were menopausal [3, 4].

Clinical presentations are variable, the main symptom is the pelvic pain especially of gravity type or abdominal distension. Metrorrhagia occurs in the context of endocrine syndrome if the ovarian tumor is secreting oestrogen or androgen hormones that cause endometrial hyperplasia [5]. Our patient did not have endocrine syndrome.

Physical examination reveals a variable-sized solid mass with a regular moving surface [5, 6, 7]. Ovarian fibromasmay be associated in 1 to 10% of cases with ascites and hydrothorax in Demon-Meigs syndrome [3, 4]. In addition to the Demons-Meigs syndrome, ovarian fibromas rarely constitute syndromes with other lesions such as: Gorlin-Goltz syndrome, which is much rarer and affects young women under 30 years of age [7, 8, 9], Peutz-Jeghers syndrome which associates rectal and gastrointestinal polyposis, periorificial lentiginosis and ovarian fibromas [1, 7]. Our patient had an isolated unilateral ovarian fibroma without endocrine syndrome or any of the above syndromes.

Ultrasound is the first line paraclinical examination to be performed if an ovarian tumoris suspected. The tumor most commonly appears as an echogenic or mixed image, anechogenic images are also reported [6, 7]. In our case, the ultrasound appearance of the ovarian fibroma was heterogeneous and echogenic. The ovarian tumors are well-definedand solid, characterized by the homogeneous echogenicity and the presence of striated shadows, with or without fluid structures in 66% of cases in the series of Nature Paladini and al [5]. Sometimes, the ultrasound suspicion of malignancy, especially in elderly patients, requires further investigations, like tumor markers and magnetic resonance imaging.

According to Troiano and al., magnetic resonance imaging can identify 82% of ovarian fibromas [10]. Tumors show low signal intensity on T2-weighted sequences. The peritoneum Irritation by the solid tumor leads to abdominal effusion and elevated CA125 values. Studies have reported a relationship between tumor size, CA125 level and the presence of ascites [5]. In our case, the marker was negative.

Ovarian fibroids are mostly associated with a good prognosis, and their treatment is based on surgical removal of the tumor. The diagnosis is established by histopathology [6, 7].

Conclusion:-

Ovarian fibromas are rare tumors. They mainly affect postmenopausal or peri-menopausal women. Clinical examination and imaging investigation generally enable the diagnosis, and histological examination allows its confirmationafter surgical removal.

Conflict of interest statement:
All the authors do not have any conflicts of interest

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