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Case Report

Fundic Myoma, Type 6 Bleeding with Intrapelvic Hemorrhage. About a Case

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Received: July 09, 2024; **Published:** July 31, 2024

Abstract

We present a case of a patient of reproductive age with an incidental discovery of a small subserous fundic fibroid, which caused hemoperitoneum, requiring surgery. The finding was diagnosed intraoperatively, which serves as an experience within the differential diagnosis of internal bleeding, considering at present the possibility of a bleeding fibroid, either due to rupture of superficial vessels or due to degenerative changes and necrosis.

Keywords: *Myoma; Type 6 Bleeding; Intrapelvic Hemorrhage*

Introduction

Acute hemorrhagic surgical abdomen in a woman can be varied, especially in patients of reproductive age, the most frequent causes being ectopic pregnancy, ovulatory follicular rupture, aneurysms or arteriovenous malformations, uterine perforations, friable pelvic tumors and many more. However, the detection of bleeding fibroids is actually a surprising finding. Fibroids are benign tumors widely known to all, associated with masses of smooth muscle tissue that appear in the uterus and cause abnormal uterine bleeding, pelvic pain and many other symptoms depending on the size of the fibroid and its location [1]. However, it is extremely rare for fibroids to cause peritoneal irritation due to bleeding, to the point of putting the patient's life at risk [2], especially because they contain a fibrous capsule with most of their blood vessels inside and those have been described in the literature, they are seen in pedunculated or multiple subserosal fibroids that compress each other, and can affect their circulation with necrosis and cystic degeneration with rupture. In others, fibroids appear sloughed or exophytic, with fragility in the support of their vessels, with easy breakage and bleeding [3-7].

The presence of hemoperitoneum produces a true surgical emergency, regardless of its amount, since the sensitivity and tolerance to pain in each patient is variable. Furthermore, the symptoms can be progressive if the rupture of the subserous myoma vessel is mild or abrupt and if it affects a large vessel.

There are more than 138 publications about it in Pubmed/Medline, curiously it affects subserosal fibroids type 6 and 7, according to the FIGO classification, whose size is greater than 6 cm on average, and can be simple or multiple, whose causes of the breakage are not well defined and are only speculative, naturally because it is very difficult to explain its breakage.

Most of the rupture of these superficial vessels of the fibroid may be due to true venous vascular congestion, with a progressive stasis that can overcome venous elasticity and rupture occurs [8]. Other causes would be capsular edema due to mass tension of the myometrial

structure or other fibroids that separates or detaches the vessels from their fibroconnective support, making them more fragile to rupture. Finally, the friction of the subserous myoma with the pelvic viscera, the intrapelvic pressure and the previous factors mentioned, would add up to produce external bleeding and hemoperitoneum [8,9].

Despite the above, the extremely rare nature of vascular rupture of a fibroid requires us to take into account, within the differential diagnosis of pelvic pain and intrapelvic bleeding, that a fibroid can present necrosis and bleed. Furthermore, this pathology affects young and menopausal women, whose evolution can vary widely [6,9].

Our case is a very small type 6 myoma, which presented vascular rupture due to necrosis of its root spontaneously with pelvic bleeding and an incidental finding during the surgical intervention.

Case Description

This is patient #099053, 29 years old, who went to the emergency room at the Sor Juana Inés de la Cruz Hospital, on November 9, 2023, due to abdominal pelvic pain, of mild intensity for several days, exacerbating with abdominal distension., without other concomitants.

She does not report any significant personal or family history, G1P1NV1; Her last menstruation date is 10/25/2023, regular periods and only occasionally uses a condom, as a barrier contraceptive. No previous surgeries, no allergies.

On clinical examination, her vital signs were stable, without hypotension, afebrile, hemodynamically compensated, cardiopulmonary stable, abdomen appeared moderately distensible, painful with depression predominantly in the left iliac fossa, no ascites wave, and greatly decreased peristalsis. At a gynecological level, there is no evidence of bulging of the fornices, no evidence of infections or cervico-vaginal defects. Vaginal and rectal examination, with mild adnexal pain, without apparent appendiceal involvement.

Transparieto-abdominal and transvaginal pelvic ultrasound was performed (Image 1 and 2), with evidence of abundant fluid in the posterior cul-de-sac, heterogeneous, suggestive of blood occupying the posterior cul-de-sac, volumetry of approximately 50cc, intrapelvic uterus, myometrium homogeneous with uterine fundus that forms a body with the left ovary, displaying a mixed echo image, not septum, a rounded dyshomogeneous image, suggestive of a congestive adnexal mass, with irregular contours and difficult to specify its edges of about 4 x 4 x 5 cms. Free endometrial cavity, secretory endometrium measuring 12 mm, homogeneous, left ovary appears deformed, difficult to identify with a small anechoic cyst measuring 1 x 1 x 1 cm. Multifollicular right ovary without alterations. Flowmetry of ovarian vessels without alterations.

Image 1: *Hemoperitoneum is observed in the cul-de-sac, dense blood content.*

Image 2: *Hydatid of Morgagni and blood are observed in the cul-de-sac.*

A contrast-enhanced CT scan was requested, which could not be performed because the equipment was damaged and the patient did not have the financial resources to perform it in a private clinic.

The paraclinical report dated 9/11/23 indicates complete hematology without evidence of anemia (Hb 12 gr), differential count with deviation to the left, normal coagulation times, negative monoclonal pregnancy test, normal transaminases, normal creatinine tumor markers (CA-125 and CEA) normal and normal urinalysis.

The patient was admitted to the operating room on 11/10/2023, for exploratory laparotomy, Pfannenstiel approach (our service does not have laparoscopy equipment), with a preoperative diagnosis of bleeding adnexal mass of etiology to be specified, due to endometriosis vs hemorrhagic antral follicle, the procedure being performed under anesthesia. spinal conductive, the positive findings being:

1. Presence of fundic and anterolateralized subserous myoma on the left near the horn, type 6, rounded, approximate size 5 x 4 x 5 cm, with necrotic, hemorrhagic apical pole and active bleeding, venous type (Photograph 1-4).
2. Left ovary without alterations with periovarian adhesions and tubal excrescences, suggestive of chlamydiasis. Presence of Morgagni's hydatid measuring 2 x 2 x 1 cm, clear content, in mesosalping.
3. Venous blood content of about 100 cc in the posterior fornix.

Photograph 1-4: *A small, bleeding, fundic, congestive subserous fibroid with active bleeding is seen. Likewise, the postmyomectomy surgical piece.*

The procedure performed was a classic myomectomy with raffia in 2 planes, the first stitch separated and the second continuous with 2-0 chrome suture. Likewise, excision of the Morgagni cyst, tube-ovarian adhesiolysis and washing with physiological solution in the fornices. The medical discharge was made in 48 hours, without complications. His outpatient postoperative follow-up was uneventful, using levonorgestrel as an endoceptive hormonal contraceptive.

The histopathological report of 11/15/2023 indicates the presence of atypical myoma, richly vascularized, with foci of necrosis.

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Nombres	Alnanny		
Apellidos	Colmenares		
Sexo	F	Edad	29
Médico			
Material Enviado	Tumor uterino sangrante – histátide izquierda		
Impresión Diagnóstica	Tumor uterino accidentado – mioma vs sarcoma		
Cédula de Identidad	21.337.907		
Fecha de Recibida	15/11/2023	Biopsia Nº	P-2469-23

REPORTE ANATOMOPATOLÓGICO

EXAMEN MACROSCÓPICO:
Nº1 BIOPSIA DE TUMOR UTERINO SANGRANTE
Se recibe fijado en formol 1 fragmento nodular de piel que mide 5 x 4 x 5 cms de tamaño, recubierto por serosa opaca y despulida. En sus tres extremos se aprecia área pardo oscuro. Al corte se aprecia superficie heterogénea pardo blanquecino hacia la superficie y un área central pardo rojiza que compromete toda la extensión de la lesión, reblandecida. Se incluyen muestras representativas para su estudio histológico.

Nº2 BIOPSIA DE HIDÁTIDE IZQUIERDA:
Se recibe fijado en formol lesión quística que mide 1.4 x 0.8 cms de tamaño, recubierta por serosa opaca y despulida. Al corte cavidad quística de paredes lisas con suntancia mucoide. Se incluyen muestran representativas para su estudio histológico.

EXAMEN MICROSCÓPICO:
Nº1 BIOPSIA DE TUMOR UTERINO SANGRANTE:
Los cortes evaluados muestran hemorragia, hemosiderina. Se identifica lesión mesenquimatica constituida por células ahusadas aumentadas en número por unidad de área dispuestas en fasciculos. Las células muestran hipercromacia de la cromatina, irregularidad de la membrana, perdida de relación núcleo citoplasma y mitosis atipica (2- 3 en 10 campos de alto poder), de citoplasma eosinofilico. el estroma es muy vascularizado. No se identificó embolización tumoral a vasos sanguineos y linfáticos, el criterio de necrosis. se observa hemorragia.

Nº2 BIOPSIA DE HIDÁTIDE IZQUIERDA:
Los cortes evaluados referido como hidátide muestran tejido conectivo denos muy vascularizado, tapizado por un epitelio mucoso simple tipico. En la pared se observan numeroso vasos sanguineos y en el área central se observa formación quística con material coloide en su luz.

DIAGNÓSTICO	Nº1 BIOPSIA DE TUMOR UTERINO SANGRANTE: LEIOMIOMA ATIPICO CON ÁREAS DE SANGRADO GRAN PROLIFERACIÓN DE VASOS SANGUÍNEOS Nº2 BIOPSIA DE HIDÁTIDE IZQUIERDA: QUISTE MUCOSO SIMPLE
NOTA	Se sugiere correlacionar con clínica de la paciente, evaluación de útero para precisar que no haya lesión de mayor severidad en tejido uterino. Los hallazgos histológicos son cónsonos con lesión de tipo Leiomioma atipico por la histología

Dra. Rosalba Florido Peña
Médicos Anatomopatólogos

P/D: Se entrega el original sin enmiendas ni tachaduras, quedando copia fiel y exacta en los archivos del Laboratorio durante el año en curso. El laboratorio no se hace responsable por cambios o modificaciones realizadas a la original.

Image 3: *Histopathological report indicating atypical bleeding myoma with vascular proliferation.*

Discussion

Leiomyomatosis or uterine myomatosis is a very common pathology in young patients, whether nulliparous or multiparous, and its multiple causes, which generate symptoms according to its location, size and hormonal response. They generally cause abnormal uterine bleeding, pelvic pain and compartment syndromes, but for 2 decades sporadic cases of fibroids with bleeding into the pelvic cavity have been described, either because the fibroid becomes twisted and necrotic, or due to fragility of the connective support that facilitates injury. the vessels spontaneously; in others due to cystic degeneration and rupture.

Although most of them produce hemoperitoneum that is not massive, the peritoneal irritation it causes makes it a true surgical emergency.

Most fibroids that rupture and bleed are always subserosal, being more common when their vessels are exposed superficially and less frequently when they degenerate and become necrotic at the base of the fibroid's nutrient vessel.

The size of the fibroid perhaps has less influence, since its pathophysiology per se does not directly affect the fibroconnective structure, but rather has to do with its angiogenic capacity that nourishes it and allows it to grow through vascular congestion and cellular mitosis.

It is worrying in underdeveloped countries, which lack diagnostic and technological experience, the approach to these bleeding fibroids, whose discovery is mostly intraoperative, incidental and not prior to surgery; not having the ultrasound technology and experience and even less the possibility of a less invasive exploratory laparoscopy and at the same time performing the surgical procedure that is warranted.

In this sense, if the symptoms are confusing, exploratory laparoscopy can identify the bleeding structure and perform the necessary surgical procedure [10].

This case leaves us with experience, to make a good diagnosis prior to surgery and if the patient has subserosal fibroids on ultrasound, CT or MRI, with hemoperitoneum, without other causes of bleeding in said area to explain it, to think that this may be the most probable cause.

Conclusion

Always keep in mind in patients with uterine fibroids and subserosal fibroids the possibility of intrapelvic bleeding with the risk of an acute hemorrhagic abdomen that requires surgical intervention. Do not rule it out in the differential diagnosis, regardless of the patient's age.

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Volume 13 Issue 8 August 2024