Scholars Journal of Applied Medical Sciences
Abbreviated Key Title: Sch J App Med Sci
ISSN 2347-954X (Print) | ISSN 2320-6691 (Online)
Journal homepage: https://saspublishers.com

OPEN ACCESS

Medicine

Giant Uterine Fibroma: About a Case at BSS University Hospital Center of Kati

Ilias Guindo[1,6*], Mamadou Dembele[3], Bouroulaye Diarra[2], Sekou Ouologuem[2], Daouda Diallo[4], Alassane Kouma[5], Moussa Fomba[1], Siaka Sidibe[6]

[1]Medical Imaging Department, Pr BSS University Hospital of Kati (Mali)
[2]Department of Gynecology and Obstetrics CHU Pr BSS of Kati (Mali)
[3]Fertila Medical Clinic, Bamako (Mali)
[4]Anesthesia Intensive Care Department, Pr BSS University Hospital of Kati (Mali)
[5]Medical Imaging Department, Luxembourg Mother and Child Hospital, Bamako (Mali)
[6]Faculty of Medicine and Odontostomatology, Bamako (Mali)

DOI: 10.36347/sjams.2023.v11i12.017 | **Received:** 08.11.2023 | **Accepted:** 16.12.2023 | **Published:** 21.12.2023

***Corresponding author:** Ilias Guindo
Medical Imaging Department, Pr BSS University Hospital of Kati (Mali)

Abstract **Case Report**

Introduction: Uterine fibroids are very common benign pathologies in women of childbearing age, but large ones are rare. Their clinical manifestations are multiple, they are most often asymptomatic. They represent the main indication for hysterectomy in the premenopausal phase. Imaging makes it possible to make the diagnosis and guide the therapeutic approach. Ultrasound is an essential and first-line examination, but in cases of large or degenerating fibroids, it is not specific. CT scanning is a second alternative. The definitive diagnosis is histological after surgery. We report a case in order to highlight the contribution of imaging. ***Observation***: Mrs AS, aged 41, housewife, without medical-surgical history. Married at 14, non-native, living in a rural area. She consults a traditional therapist due to an increase in the volume of her stomach, the latter confirms a "masked pregnancy" (not visible to modern medicine). Faced with the significant increase in volume and on the advice of a family member, she decided to come to town for better care. Received by a gynecologist at the Kati University Hospital, the examination revealed an hourglass-shaped abdominopelvic mass, lobular, firm and painless, measuring 37cm. The imaging (ultrasound and CT) carried out confirmed a polymyomatous uterus, the two largest of which were corporal of the interstitial type, measuring 127 and 110mm in diameter. A total hysterectomy performed brought back a piece of 15,000 grams, histology confirmed a leiomyofibroma. The postoperative course was simple. ***Conclusion*:** Giant fibroids are rare. The symptomatology is varied. Imaging is essential in the diagnosis but confirmation is histological after surgery.

Keywords: Giant uterine fibroid, imaging, histology, Kati University Hospital.

INTRODUCTION

Uterine fibroids (also called myomas or uterine leiomyomas) are tumors of smooth muscle cells, they represent the most common female pathology in gynecology. These are the most common benign gynecological tumors in women of childbearing age [1]. Their incidence increases with age but large fibroids are rare. Their clinical manifestations are multiple and depend on their sizes, their numbers and their topographies; most often, they are asymptomatic. They represent the main indication for hysterectomy in the premenopausal phase [2]. They pose a problem of differential diagnosis with other uterine tumors [3]. Imaging makes it possible to make the diagnosis and guide the therapeutic approach. Ultrasound is an essential and first-line examination, but in the case of a large or degenerating fibroid or in the case of a deformed polymyomatous uterus, it is not specific. Computed tomography (CT) is a second alternative in our regions where magnetic resonance imaging is not available even if it is more interesting. Therapeutic management depends on several parameters: age, hormonal status of patients, size, number, location of fibroids and desire to become pregnant [2]. In rare cases, they can reach an enormous volume and be the cause of a mass effect and sometimes serious complications [4]. The definitive diagnosis is histological after surgical treatment. We report a case in order to highlight the contribution of imaging (ultrasound and CT).

OBSERVATION

Mrs AS, aged 41, housewife, with no known medical-surgical history. She was married at the age of 14, unmarried, living in a rural area. The start of the symptoms dates back 2 years, marked by an increase in the volume of her stomach, before which she consulted a traditional therapist, the latter confirming a "masked pregnancy" (not visible by modern medicine). Faced with the significant increase in volume associated with metrorrhagia and edema of the lower limbs, on the advice of a family member, she decided to consult again in a Community Health Center in the place where she would have been advised to come. in town for better support. Received by a gynecologist on April 6, 2023 at the Kati University Hospital, the examination revealed an hourglass-shaped abdominopelvic mass, lobular, firm and painless, measuring 37cm (figure 1). The vulva soiled, blackish, the left lateral cervix, firm, short and closed. An ultrasound performed revealed multiple myomatous nuclei, some of which were calcified, others with areas of necrosis, the two largest were corporal and fundic, of the interstitial type, measuring 127 and 110mm in diameter (figure 2). Neither ovary could be visualized. Taking into account the number and sizes of the myomas and the volume of the uterus, a CT scan was performed with acquisitions without and after injection of the PDC (contrast product). It revealed a large uterus measuring 327x181mm containing multiple myomatous nuclei of interstitial and subserosal type, some were calcified, others in necrosis, the largest measured 127mm in diameter (figure 3). The whole exerted a mass effect on the neighboring organs, thus pushing the loops upwards and backwards, the abdominal aorta to the left and backwards. There was no contrast enhancement of the nuclei after injection. A total hysterectomy was proposed. After obtaining the couple's agreement, under spinal anesthesia, this hysterectomy with adnexectomy was performed through the upper route, sparing the ovaries. She brought back a piece measuring 39x29x22cm, or 15,000 grams (figure 4). Histology confirmed a leiomyofibroma without signs of malignancy. The postoperative course was simple. The edema and other clinical signs disappeared two days postoperatively.

ICONS ILLUSTRATING OUR CASE

Figure 1: Photo of the patient's stomach showing a voluminous hourglass abdomen

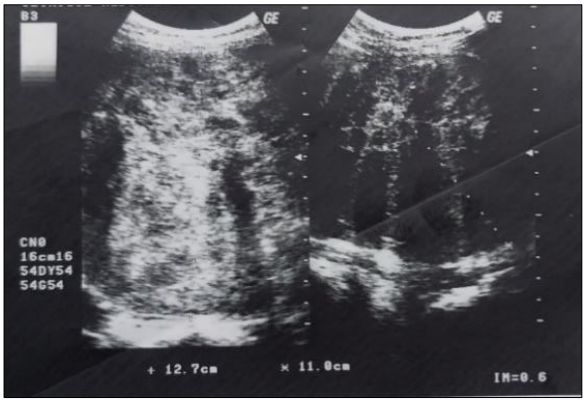

Figure 2: B-mode ultrasound showing two large myomatous nuclei, rounded, with clear and regular contours

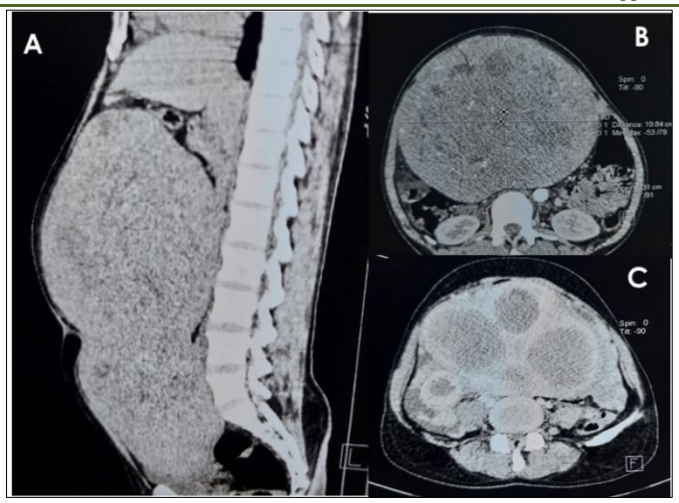

Figure 3: Abdominal CT in parenchymal window

Non-injected sagittal reconstruction reveals a large uterus creating a peanut shell image (A); Axial section, in arterial view showing a large myoma pushing back the loops and the abdominal aorta (A); in portal time showing multiple myomatous nuclei not enhanced by the contrast product (B).

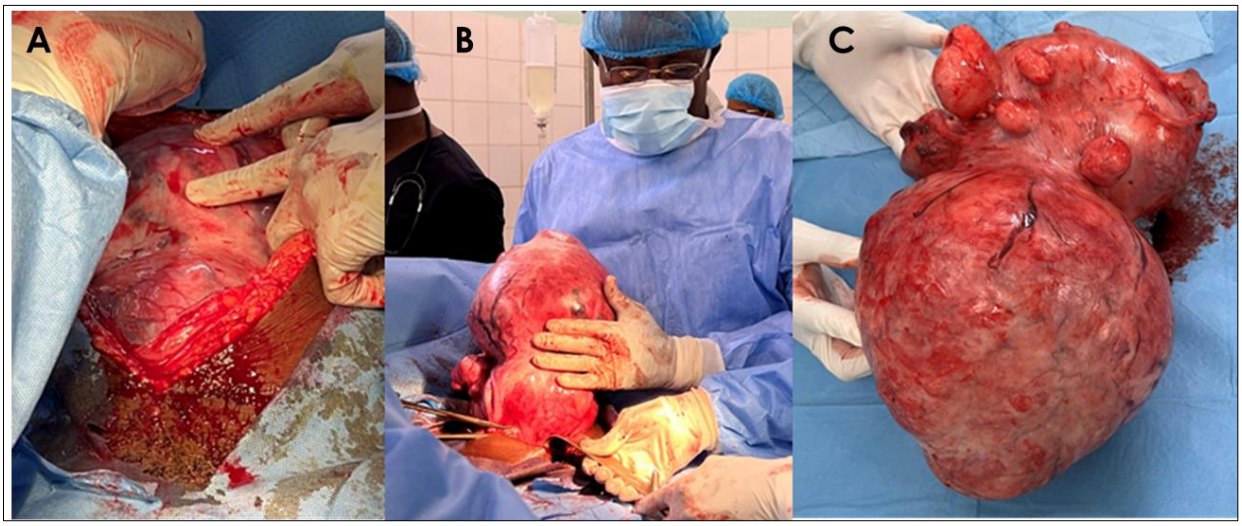

Figure 4: Intraoperative image after median subumbilical incision revealing a large polymyomatous uterus (A and B). Total hysterectomy surgical specimen showing subserosal myomas (C)

DISCUSSION

Uterine fibroids, also called myomas or leiomyomas, constitute a common entity in gynecology 30-50% [5], this frequency increases in childbearing age before disappearing after menopause. Estrogen and progesterone dependence explains why fibroids often improve after menopause. Their sizes range from a few millimeters to a few centimeters; large myomas are rare [2]. Uterine fibroids are characterized by their variable anatomical forms responsible for their clinical polymorphism. Symptoms depend on the location, size and progression of the disease. The main symptom is abnormal bleeding (menometrorrhagia), dysmenorrhea, pelvic pain or menstrual cycle abnormalities associated with an increase in abdominal volume. Fibroids can reach large sizes and measure more than 11.5 kg. Large sizes are rare and have a noisy clinical picture [6]. They can be asymptomatic and are diagnosed incidentally by clinical examination or imaging [4]. Our patient complained of metrorrhagia, an increase in abdominal volume and edema of the lower limbs. Ultrasound (trans abdominal, transvaginal, contrast hystero-echo) is the most used modality due to its availability, ease of use and cost-effectiveness [2]. Although it is an important examination, in the case of giant fibroids it is insufficient. The suprapubic route is more interesting for tumors larger than 5cm. It is a hypoechoic and heterogeneous mass. Doppler-vascularized fibroids with low flow resistance have been reported in the literature [7]. It only shows the mass without giving information on its exact origin and its extension. We witness the same phenomenon with CT scanning. In fact, it only makes it possible to identify the location of the tumor and the signs of malignancy such as the presence or absence of

ascites, lymphadenopathy or metastases, etc [4]. It has limited value in delineating the location of myomas in relation to the endometrium or myometrium [8]. Magnetic resonance imaging is the most sensitive and specific examination in the diagnosis of giant fibroids [4]. Our patient did not benefit from an MRI, the results of the ultrasound and CT were conclusive. Although it was nulligest, the hysterectomy was the only alternative in our case. Uterine fibroids are currently the most common indication worldwide for hysterectomy [2]. Surgical treatment depends on the age of the patient, her desire to become pregnant and the size of the fibroid. It can be conservative in order to preserve the patient's fertility or radical (hysterectomy) [9]. Hysterectomy is associated with significant morbidity and mortality and imposes a significant economic burden on the health care system [10, 11]. The postoperative course was simple for our patient; her discharge was authorized on the third postoperative day. Embolization is currently under discussion, it would be interesting before surgery in the case of giant fibroids in order to reduce the size and facilitate surgery. Embolization with curaspon or gelatin is an interesting alternative. Indeed, it increases the chances of carrying out a conservative treatment such as a myomectomy with perfect enucleation and preserving the fertility of the patient. It also allows for better operating conditions [2]. This embolization is currently not feasible in Mali. Complications are rare and very well tolerated by the patient [10, 12]. Benign metastasizing leiomyoma (BML) to the lung has been reported [13]. Histology confirmed leiomyoma without signs of malignancy. Our patient shows no signs of metastasis.

CONCLUSION

Giant fibroids are rare, they are perceived as pregnancy in certain circles. The symptoms are varied, dominated by metrorrhagia and abdominal heaviness. Imaging is essential in the diagnosis and helps guide the approach. The treatment is surgical in our region and the confirmation is histological after hysterectomy.

BIBLIOGRAPHY

1. Salman, T., & Davis, C. (2010). Uterine fibroids, management and effect on fertility. *Current Opinion in Obstetrics and Gynecology*, *22*(4), 295-303.
2. Benayada, M., Ch'michi, N., Essabbagh, Y., Echchikhi, M., Bennani, A., Lakhdar, A., Zeraidi, N., Kharbach, A., & Baidada, A. (2020). Giant Fibroids: Diagnosis and Management Modality: About Two Cases and Literature Review. *Sch J App Med Sci*, *8*(10), 2313-2317. ISSN 2347-954X (Print) | ISSN 2320-6691 (Online)
3. Lemhaba, B., Lemrabott, E., Mohamed, M., lemine, K., Saoud, N., Mamouni, S., Errarhay, C., Bouchikhi, A., & Banani. (2021). Giant uterine fibroma in cystic degeneration: problem of diagnosis and management about a case and review of the literature IOSR *Journal of Dental and Medical Sciences* (IOSR-JDMS) e-ISSN: 2279-0853, p-ISSN: 2279-0861.20(4), 07-11 www.iosrjournals. org
4. Lham, B., Oumaima, M., Taher, B., Najia, Z., Aziz, B., & Aicha, K. (2017). Giant Uterine Fibroma: About A Case And Literature Review: Souissi Maternity Hospital, Ibn Sina University Hospital, Rabat Morocco. Moroccan *Journal of Medical Sciences*, *21*(2), 56-58.
5. Fernandez, H., Chabbert-Buffet, N., Koskas, M., & Nazac, A. (2014). Epidemiological data for uterine fibroids in France in 2010-2012 in medical center--analysis from the French DRG-based information system (PMSI). *Journal de Gynecologie, Obstetrique et Biologie de la Reproduction*, *43*(8), 616-628.
6. Cissé, M., Konaté, I., Ka, O., Dieng, M., Dia, A., & Toure, C. T. (2008). Incarcerated procidentia due to giant cervical fibromyoma: a case report. *Journal de gynecologie, obstetrique et biologie de la reproduction*, *37*(8), 802-803.
7. Amber, I., Kennedy, G., Martinez, H., Pearson, J. M., & Jimenez, E. (2009). A leiomyoma in a cachectic woman presenting as a giant abdominal mass. *Journal of radiology case reports*, *3*(10), 23. doi:10.3941/jrcr.v3i10.324
8. Bradley, L. D., Falcone, T., & Magen, A. B. (2000). Radiographic imaging techniques for the diagnosis of abnormal uterine bleeding. *Obstetrics and Gynecology Clinics of North America*, *27*(2), 245-276.
9. Nguyen-Duc, H. (2003). Large uterine fibroma in a 15 year old adolescent. Giant leiomyoma in adolescence. *Journal de Gynecologie, Obstetrique et Biologie de la Reproduction*, *32*(8 Pt 1), 748-750.
10. Loffrody, R. B., Ens, A., Guium, B., Dranssajrmt, L., Erais, J. P., Cercuedil, K., & Ause. R. *Preoperative embolization of large uterine fibroids in young women*: long-term MRI follow-up.
11. Clark-Pearson, D. L., & Geller, E. L. (2013). Complications of hysterectomy. *Obstet Gynecol*, 121, 654e7312.
12. Dumousset, M., Cassagnes, C. Mage, Boyet. Preoperative embolization of fibromesuterins (EPFU) OF YOUNG WOMEN (22 PATIENTS).
13. Varlık, M. H. (2015). Kazım Karabekir Caddesi Ignorance of a large leiomyoma: Case report on unusual symptoms of a large leiomyoma: *Ann Med Surg (Lond)*, *4*(4), 431–433.