Giant Intracavitary Solitary Uterine Myoma: About a Case

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Abstract

We report the case of Mrs D. A, 36 years old, with no known medical or surgical history, was seen in consultation on July 20, 2023 at the LATINO medical clinic in Bamako (Mali) for an intra-abdominal mass several months old, associated with sub-umbilical pain, hyper polymenorrhoea and pollakiuria, in a setting where she had wanted a child for more than 10 years. Clinical and paraclinical examination concluded that the patient had a giant solitary myoma. A laparotomy myomectomy was performed on July 26, 2023. The myoma weighed 1500 g with a long axis of 20 cm. Histological examination of the surgical specimen revealed a uterine leiomyoma. Post-operative follow-up was unremarkable, and the patient is being followed by our obstetrician-gynecologist.

Subject Areas
Gynecology & Obstetrics

Keywords
Myoma, Giant, Solitary, Intracavitary

1. Introduction

Uterine myoma is the most common pathology of the female reproductive tract.
It is a benign tumor that develops on the smooth muscle cells of the uterus, and is known to be the prerogative of young African women [1].

Usually small in size, ranging from a few millimetres to a few centimetres, and often asymptomatic, uterine myomas can present in larger dimensions, up to several decimetres, in which case we refer to them as giant myomas [2].

Myomectomies are primarily intended for women of childbearing age whose myomas are symptomatic: menorrhagia or menometrorrhagia, pelvic pain and signs of compression of adjacent organs, notably the bladder with pollakiuria and rectum with constipation. It should be noted, however, that an increasing number of patients over the age of 40 are refusing radical treatment and requesting conservative treatment [3].

The aim of our work is to describe the clinical and therapeutic aspect of an extremely rare case of giant solitary myoma in a 36-year-old female patient with no known medical or surgical history, and to review the literature.

2. Patient and Observation

Mrs. D. A, 36 years old, with no known medical or surgical history.

Obstetrical history: Three pregnancies, one (1) parity, two (2) abortions, one (1) live, the last pregnancy, which was also the last abortion, was 8 years ago.

She is a merchant married in polygamy. The co-wife has 5 children.

The patient is seen in consultation on July 20, 2023 for an intra-abdominal mass several months old, progressively increasing in size. The swelling was associated with subumbilical pain, hyperpolymenorrhea, pollakiuria, asthenia and edema of the lower limbs. All this is in a picture of desire for a child over 10 years old.

There was no evidence of contraceptive use, smoking or alcoholism, but the patient was sedentary.

**Physical examination:**

Conjunctivae well coloured. Axillary temperature 36.8°C. Body weight 61 kg. Body mass index (BMI) estimated at 21.4 kg/m² S/C. Oedema of lower limbs leaving buckets. Blood pressure 110/67 mmHg. Heart rate 84 beats/minute.

**Abdomen:** globular at hypogastric level, with a hard, mobile mass on the deep plane, the upper edge of which protruded beyond the umbilicus. The lymph nodes and the examination of two breasts were unremarkable.

**Gynaecological examination:** nulliparous central cervix with no macroscopic signs of cervicitis, soft vaginal walls, large uterus, with bulging cul de sacs of Douglas. The fingernail came back with normal-looking secretions.

We hypothesized a uterine tumor.

**Further investigations:**

- Abdominopelvic CT scan: Large uterine myoma with mass effect on neighbouring organs (see Figure 1).
- Hemoglobin level 11 g/dl. Blood group A rhesus positive (AB+).

After the diagnosis of large uterine myoma was made, the patient consented to
myomectomy rather than hysterectomy.

Two iso-group, iso-rhesus red blood cells were requested.

To minimize the risk of bleeding, the anesthetist instituted a protocol of 2 intraoperative 500 mg ampoules of tranexamic acid (see Figure 2).

Intraoperatively, after the cavity had been breached, a large intracavitary solitary myoma had been enucleated without difficulty. See photo (see Figure 3).

Hemostasis, hysterorrhaphy, placement of a Rédon drain in the Douglas cul de sac.

The operative specimen weighed 1500 g and measured $20 \times 15 \times 5$ cm. It was sent for pathological examination, which revealed a tumor proliferation consisting of bundles of leiomyocytes and fibroblasts without atypia.

The patient underwent thromboprophylaxis and was discharged on the 5th postoperative day. Postoperative management was straightforward.

3. Discussion

Leiomyoma, commonly called myoma or uterine fibroma, is the most common benign tumor in women of childbearing age. It affects 20% to 40% of women over the age of 35. The fibroma is developed at the dependence of the smooth muscle fibers of the myometrium, its growth is hormone-dependent [4].

The frequency of uterine fibroids in hospital practice in some departments was 17.2%. The average age of patients was 41.53, with women in genital activity
the most affected at 95.2% [5].

Large fibroids can back up the bladder (pollakiuria) or compress the rectum (tenesmus). A large fibroid developed in the broad ligament may deform the ureter. Exceptionally, a large landlocked fibroid may compress the ureters at the promontory, leading to upstream ureterohydronephrosis [6].

When patients are symptomatic, the number, size and/or location of fibroids are critical determinants of their clinical manifestations. The most frequently reported symptoms include heavy menstrual bleeding, dysmenorrhea, non-cyclical pain, urinary symptoms, fatigue and constipation [7] [8].

Our patient presented with hypogastric swelling associated with subumbilical weight-type pain, hypermenorrhea, pollakiuria, asthenia and edema of the lower limbs.

A recent meta-analysis demonstrated that submucosal, intramural and subserous fibroids have different effects on fertility, and are mainly related to submucosal lesions leading to implantation defects [9].

Despite the fact that our patient had conceived three (3) pregnancies, two (2) of which were abortions, the desire for a child was a very frustrating aspect of her life.

Thanks to the use of molecular biology tools, she is now the subject of a great deal of research, and we now have a better understanding of the various issues involved.

Classic clinical findings (fibroids appear at puberty, regress during meno-
pause, worsen during pregnancy, are more frequent in obese women...) underline the relationship between myoma and the estrogenic hormonal environment [10].

Difficulty in procreation, genital bleeding and the CT scan result allowed us to rule out the diagnosis of an ovarian tumor.

Ultrasound is the imaging test of first choice for suspected fibroids, and shows high sensitivity and specificity in the diagnosis of this condition [11].

In ELOUARDIGHI’s series, ultrasound enabled the diagnosis to be made in the majority of cases. The myoma was unique in 53.4%. Fibroids between 5 and 10 cm in size were the most frequent (52.4%), with a predominance of fibroids [5].

Ange, et al. found 1 myoma in 39.94% (419) of the study population; 28.60% (300) had 2 myomas, 16.59% (174) had 3 myomas [12].

The therapeutic course of action depends on several parameters: the patient’s age, hormonal status and desire for pregnancy. Treatment may be medical or surgical. Surgical treatment has evolved considerably, with the traditional techniques of myomectomy and hysterectomy by laparotomy being supplemented by endoscopic methods using laparoscopy or hysteroscopy, and embolization representing an elegant variant of surgical techniques [5].

Laparotomy myomectomies have become less frequent since the advent of operative hysteroscopy, which enables resection of submucosal myomas, and operative laparoscopy, whose best indication is single interstitial and/or subserous myomas of 3 to 8 cm. However, there are still indications for laparotomy. These are defined essentially on the basis of clinical findings, pelvic ultrasound and diagnostic hysteroscopy [3].

Due to the size of the myoma, we opted for laparotomy via a subumbilical midline incision. Once the cavity had been breached, it was found to be a large intracavitary solitary myoma which had been enucleated without difficulty.

Hemostasis with electric scalpel, hysterorrhaphy in separate points with Vicryl 0, placement of a Rédon drain in the Douglas cul de sac. Abdominal wall closure.

The operative specimen weighed 1500 g and was 20 cm long. It was sent for anatomopathological examination.

The patient underwent thromboprophylaxis and was discharged on the 5th postoperative day. Post-operative management was straightforward.

Postoperative fever is not uncommon, despite intraoperative antibiotic prophylaxis. In most cases, no cause is found, and the fever disappears spontaneously within a few days. In particular, we look for phlebitis, urinary tract infection, pulmonary infection or a pelvic etiology linked to the operation, most often an intramural hematoma. Pelvic ultrasound should be ordered to confirm the diagnosis [3].

Recurrences are frequent. Rates ranging from 5% to 45% have been reported, with the longer the observation period, the higher the rate. This may be due in part to incomplete exeresis of the myomas during the operation, leaving in place
in particular small myomas deeply embedded in the myometrium [3].

Synechia is another complication that is far more dramatic, especially in the context of a desire to have children. They are particularly to be feared in the case of opening of the uterine cavity with removal of submucosal myomas. They should be suspected in cases of postoperative hypomenorrhoea [3].

Pregnancy rates of 50% - 60% have been reported after this type of procedure in patients with unexplained labelled infertility [13].

A recent retrospective study [14], however, shows that myomectomy by laparotomy increases the chances of pregnancy after the procedure (from 28% to 70%) and reduces the risk of miscarriage (from 69% to 25%), suggesting a beneficial effect of myomectomy, tending to prove an effect beneficial of the excision of interstitial and subserosal myomas on the achievement and outcome of pregnancies.

The patient is monitored by our gynecologist, and pregnancy is not recommended before two years post-op.

4. Conclusions

Uterine myomas are the most common pathology of the female reproductive tract.

Depending on their symptomatology, location and/or size, they can the couple’s chances of procreation.

Laparotomy myomectomies continue to play an important role in the management of patients with giant uterine fibroids.

Declaration of Interest

The authors declare that they have no conflicts of interest in relation to this article.

References


