

The medical and surgical treatment in voluminous uterine fibroma in a young patient

- case report -

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Abstract

Fibroids uterine at the young women is extremelly rare present. Impressive cases like this exceptionally are cited in the literature. In this case a 28 years old woman is presented at hospital having a significant tumor (36/24 cm) which was diagnosed as a uterine fibroid. The therapeutic solution was both medical treatment followed by surgical removal of the tumor with preservation of uterine wall. Preoperative hormonal therapy allowed the fibroid reduction thus facilitating subsequent surgical removal.

Keywords: fibroid, diphereline, fertility

We present the case of a 28 years old patient, which presented at gynecological consultation accusing moderate, persistent pain, in the pelvis and left iliac fossa, with radiation in superior flank. The second accuse has been an inability to become pregnant. A large tumor was detected, accompanied by pain, clinical and laboratory specific evidence of a uterine fibroma. Thinking about the patient's age and her desire to obtain a future pregnancy the patient was guided to service our clinic.

The patient was admitted in our clinic on March 2008 to assess and establish the proper therapeutic decision. Personal physiological and pathological history, and the hereditary history are nonsignificant. Local examination revealed a small uterus, with a voluminous tumor that spreads all over its surface, including the pelvic area and left iliac fossa, progressing to the upper limit near coastal left border. Maximum diameter determined by genital clinical examination and pelvic ultrasound was about 36cm. The tumor was dense consistency with irregular outline with painful sensitivity to palpation and mobilization.

Echographic transvaginal examination confirmed clinical suspicion of existence of an important fibromatous tumor. Abdominal ultrasound revealed a voluminous tumor with fibromatous appearance, echodense structure, located in front of the uterus, with impressive size (36/24cm). Transvaginal ultrasound shows a normal uterus, pushed posterior by the formation developed on the anterior wall of the uterus, evolving to the isthmus. The annexes were apparently normal on the ultrasound.

Considering the age of 28 years and the desire for future pregnancy and the over-dimensioning of the tumor with the fibromatous structure and with corporeal-isthmus location, was decided a drug therapy with diphereline to reduce the volume of the tumor, monthly, for 4 months, at a dose of 3.75/fl. After the treatment, amenorrhea installed and it was expected the reinstallation of the menstrual cycles to establish the moment for surgical intervention. After 60 days, since the last injection with diphereline the first menstrual cycle appeared.

The patient was admitted in our hospital a week after the menstrual cycle, to be evaluated for the sur-

gical intervention. The local exam revealed a reduction to the half of the fibromatos tumor. Ultrasound shows the same reduction of the tumor, at the dimensions of 18/10 cm, but with the same structural characteristics. The laboratory investigations were normal: BUN 31mg%, creatinine 0.5mg%, blood glycemia 78mg%, AST 12 U/L, ALT 11 U/L, Hb 12mg%, Ht, erythrocytes 3,83x10⁶/mmc, leucocytes 9000/mm, platelets 127000/mm, APTT 37.5, INR 1.26, normal urine sample.

On the clinical and laboratory examinations, is established the diagnosis of voluminous uterine fibromatosis, therapeutically reduced with diphereline. After a preoperative preparation surgical intervention was performed by median pubo-subombilical approach. The intervention was performed under general anesthesia. The exploration of the pelvic area reveals a firm tumor, which is hardly dislocated from the pelvic cavity, with an irregular contour and large base of implantation on the anterior face of the uterus, extended to the uterine isthmus and under peritoneum of the bladder and the uterus. Behind the tumor is observed the corpus of the uterus, of normal appearance, the adnexial areas, with normal macroscopic appearance. The decollation of the peritoneum of the bladder and the uterus was performed, to expose and excise the base of implantation of the fibromatous tumor. The difficulty of the surgical

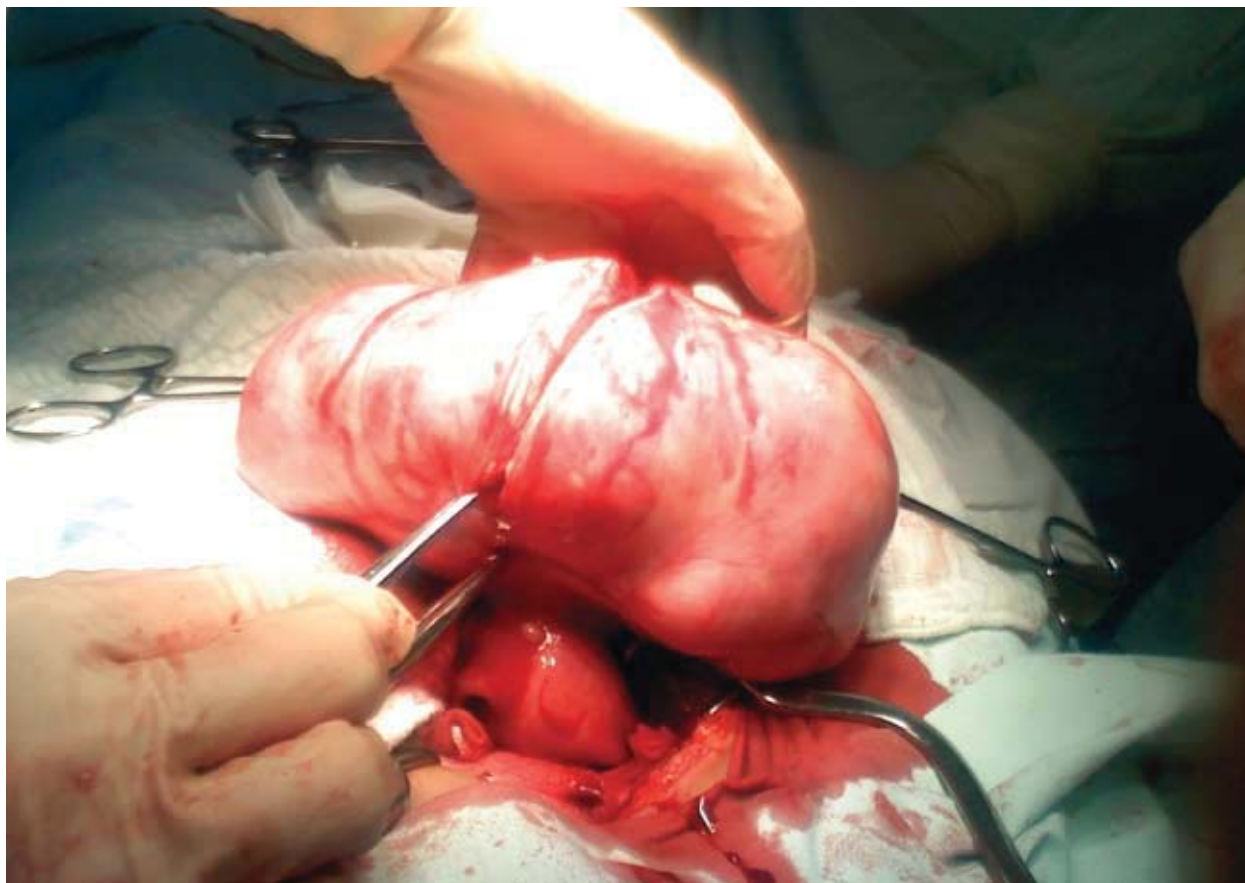
procedure was represented the approach of the tumor in the area of the uterine isthmus. It was performed the approach on the entire base of implantation of the tumor, avoiding to open the uterine cavity. The intraoperative bleeding was moderate. The removal of the tumor, without opening the uterine cavity was the goal, which was accomplished.

Postoperative, were administered antibiotics, pain killers and antiinflammatory drugs. The evolution of the patient was favorable and the patient was discharged after 7 days. Hystological, the tumor was a leiomatous structure with multiple areas of hyaline and calcium degeneration.

The patient was monitorized ambulatory, and she was evaluated at one month, 3 months and six months. The evolution was favorable, at the last gynecologic control, the uterus and the ovaries were normal and the transvaginal ultrasound confirmed all these aspects.

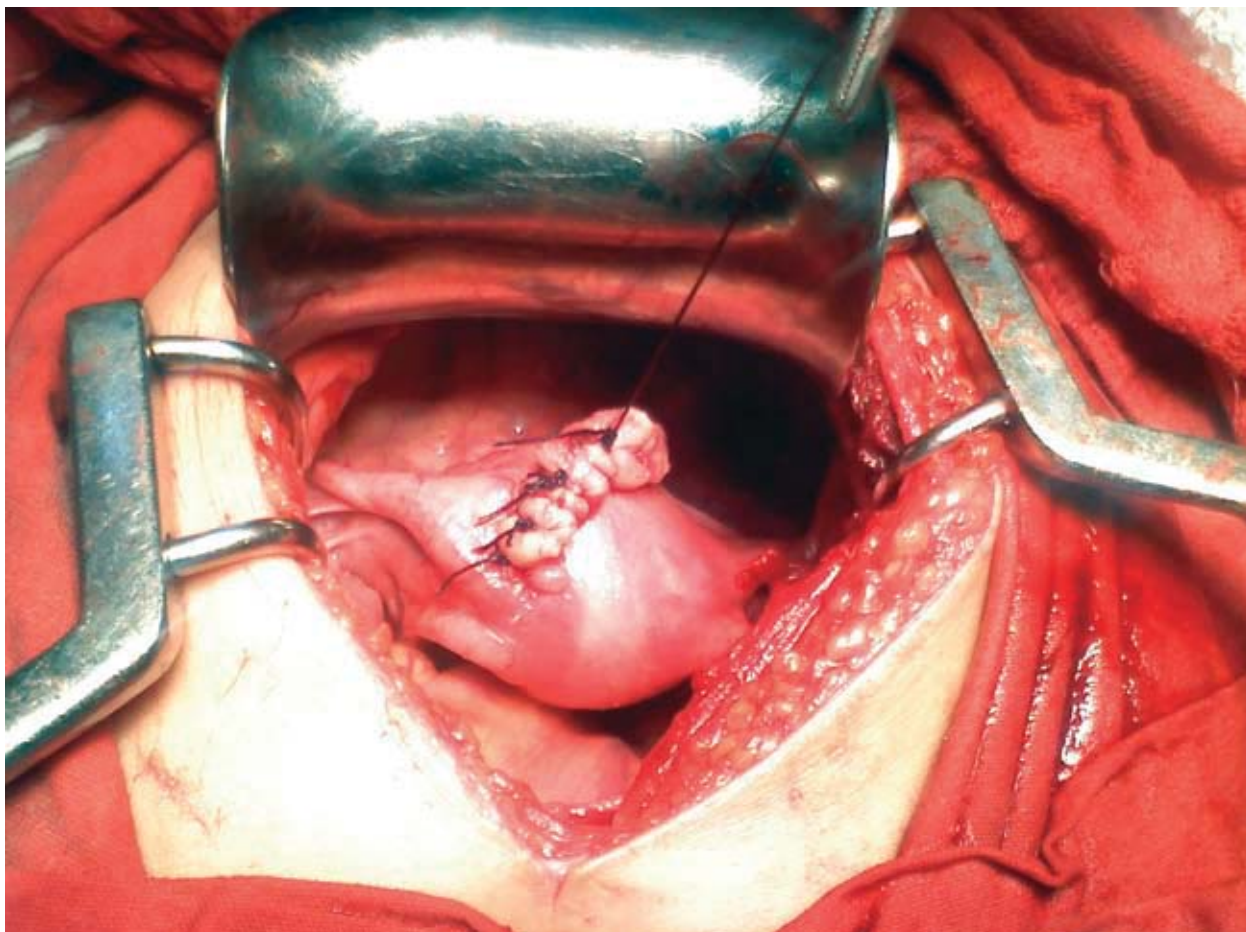
Discussions

Finding a voluminous uterine tumor at a young patient, rises diagnostic and therapeutical problems. In this case, in the detection of a large voluminous uterine mass requires tumoral characteristics assessment, useful to find the etiology to a conservative therapeutic management. If the tumor, under the medical treatment with dipherelin, did not show the reduction



*Figure 1.
The aspect of
the uterine
fibroma after
the reduction
with dipherelin,
intraoperative*

Figure 2.
The intraoperative aspect after the removal of the tumor



of its volume and its base of implantation, then is indicated a surgical intervention less conservative, upon a subtotal and total hysterectomy (in case of massive bleeding of the uterine isthmus). In the study of Peterson with more such cases, are showed more complications associated with this procedure.

The particularity of this case is that a young patient, with a voluminous uterine fibroma, for her age and is associated with sterility. The benign character, revealed trough histological exam and the possibility of surgical removal of the tumor determined a favorable prognosis about obtaining a pregnancy. Generally, it should be remembered that the management of such a surgical intervention could be followed by bleeding complications, with the impossibility of surgical removal of the entire tumor and the necessity of a radical intervention.

GnRh agonists have a real benefit by reducing of the fibromatous dimensions through the local action of the estrogens. The antiproliferative effect of GnRh agonists was correlated with the growth of intracellular expression of annexin V, mediated by activation of protein kinase C (PKC 28).

Conclusions

The role of dipherelin is clear in reducing the dimensions of the uterine fibroma.

The surgical intervention without the preliminary reduction of the tumoral volume trough the therapy with dipherelin, wouldn't had the same results.

The association of these two therapeutic measurements, medical and surgical, gives the patient a normal gynecological status and the chance to have a pregnancy in future. ■

References

1. Berek JS et al Novak's Gynecology, William & Wilkins 68 :179-84.
2. SperoffL, Fritz MA .ClinicalGynecologicEndocrinology and Infertility, Lippincott, 2005 117:417-24.
3. StraussJF, Barbieri KL.Yen and Jaffe s ReproductiveEndocrinology, Saunders, 2004 61.(11) 625.
4. SperoffL,Fritz MA .Clinical Gynecologic Endocrinology and Infertility, Lippincott, 2005 117:417-24.