



## Systematization in the Conservative Surgical Management of Myomas of Large Elements. Uterine Desarterialization DAU. POSADAS Technique. Case Report

Javier Enrique Oviedo Venerio<sup>1\*</sup> and Cols Dra Maria Teresa Zelaya Velasquez<sup>2</sup>

<sup>1</sup>Specialist in Gynecology and Obstetrics, UNAN Leon, HEODRA Leon, Nicaragua

<sup>2</sup>Specialist in Gynecology and Obstetrics, MINSA, UNAN Leon, Nicaragua

**\*Corresponding Author:** Javier Enrique Oviedo Venerio, Specialist in Gynecology and Obstetrics, UNAN Leon, HEODRA Leon, Nicaragua.

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### Abstract

Myomectomy is an alternative to offer in cases of young women, without children, who wish to preserve their uterus, however, it is essential to map the fibroids, pre-surgical planning, and a detailed informed consent of the risks [1]. The most frequent errors in myomectomy are inappropriate uterine incisions and ineffective hemostasis.

The purpose of every surgeon during myomectomy is to use pharmacological actions and surgical techniques from the existing arsenal whose common denominator is to decrease the flow in the uterine and ovarian arteries.

We use the Posadas technique for uterine dearterialization as it is considered easier and faster to perform combined with pharmacological actions and mechanical effects such as the use of tourniquets, we describe each of the actions carried out to reduce blood losses during the myomectomy of large elements in selected cases [2].

**Keywords:** Myomectomy; Uterine Dearterialization; Hemorrhage and Myomectomy; Posada Technique

### Clinical Case

Female patient, three year married, 35 years old, childless, no previous surgeries, with history of heavy transvaginal bleeding during their menstrual periods, duration of their menstrual cycles of 8 days. heavy menstrual bleeding with clots and use of up to six nighttime sanitary pads. with a pathological personal history, history of Migraine, Denies other chronic diseases. Normal Pap test results.

Consultation with extra pelvic abdominal mass complaint, 20 cm above symphysis, resealing a 20-week size (Figure 1).

History of feeling weighty, polaaquiria, no difficulty in defecation. Stable vital signs, no dizziness to postural changes, saturating 97 percent, FC 80 PA 110/70. Transabdominal and per vaginum ultrasound was performed.

### Ultrasound finding

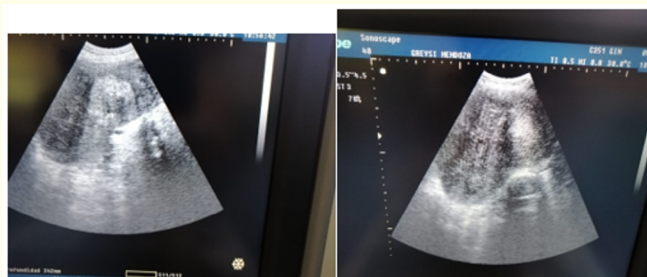
The location of the fibroids was mapped (Figure). Finding uterus increased in size, irregular, heterogeneous, occupies the entire pelvic hole, with focal lesions in number of 8 located at the uterine background level measuring 12 cm by 10 cm the largest, and focal lesions of an average size of 5 cm located on the front and back face Uterus. Observed a 4 cm posterior-sided focal lesion is evident that makes contact with the endometrium and deforms it.

No history of urinary tract infection, No hydronephrosis, No ureter mechanical compression suggestive data.

Pre-surgical hematocrit of 43%. Type and RH O positive. Abdominal tomography was not performed due to cost. It is scheduled for surgery prior to pre-surgical anticipation and 2 packs of O-positive blood are guaranteed. It explains the risks of bleeding,



**Figure 1:** Shows Fibroids of large elements, extrapelvic uterus, simulating a pregnancy.



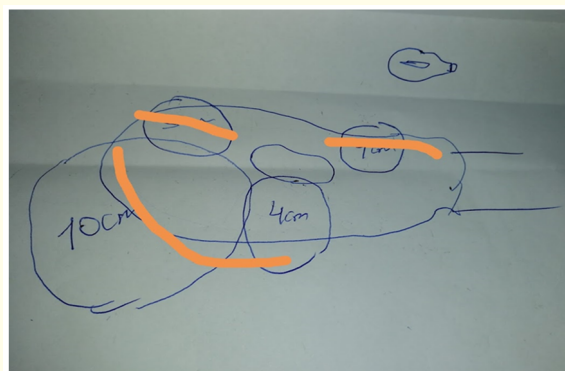
**Figure 2**

postoperative adhesions and intrauterine adhesions that would affect your fertility, detailed informed consent is signed.

### Preoperative evaluation

Within the systematized pre-surgical planning, comprehensive ultrasonographic mapping by the surgeon himself excels. This allows to plan the type of incision at the level of the uterus, with the premise of extracting the fibroids from the same incision, in our case longitudinal incision was made anterior and posterior aspect of the uterus.

It is essential to enter the operating room in this type of case, in the best conditions of the patient, without anemia. However, despite techniques to decrease bleeding, hematocrit decreased by 9%. In the post-surgical.



**Figure 3:** Show planning the Ultrasonographic mapping location of pre-surgical fibroids.

### Surgical findings

Extra pelvic uterus, deformed with fibroids on the front and back side the largest localized at the uterine fundus level size of 20 cm in length by 15 cm wide. According to pathology report and an approximate weight of 1000gr, a total of 14 fibroids extracted, other lesion average size 5 cm (Figura 4, 7, 8).



**Figure 4:** Shows Tran surgical findings and extra pelvic uterus.

Surgical technique of Posadas is indicated in any hemorrhagic pathology that compromises segment 1 of the uterus, this includes all that corresponds from the cervix upwards.

Under anesthesia, subdural blockage, prior to asepsis and antisepsis, longitudinal incision is made in skin that extends from the symphysis of the pubis to umbilical scar, by planes reaches

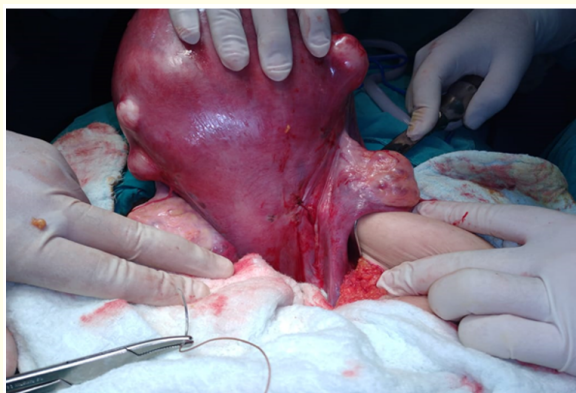
the uterine cavity, is explored and no peritoneal adhesions are evidenced, intestines are isolated with compress.

Misoprostol 2 tablets, 400 mg intravaginal, placed after subdural blockage after putting the Foley tube in the bladder.

### Posadas surgical technique description

After the externalization of the uterus, previous eversion is performed, a posterior face is identified artery and vein vascular package, avascular place site of the wide ligament and sutures are placed with Absorbable chromic suture number 1, square knot, emphasizing taking 1 cm of the uterus, and verifying the absence of tear or bruising (Figure 5, 6).

Securing the bilateral knot. We begin to pass the needle from posterior to anterior right side. Then the needle is inserted posteriorly covering 1- 2 cm of the uterus. Encompassing vascular bundle. We knot on the back of the uterus (Figure 5, 6).



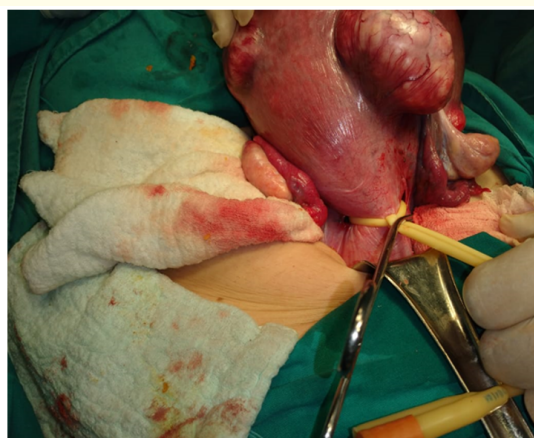
**Figure 5:** Show the location of the Right uterine artery ligature technique of POSADAS.



**Figure 6:** Show level of Bilateral ligation of uterine arteries technique of POSADAS.

Then of bilateral ligation of uterine arteries we used Tourniquet Technique.

We make through wide ligament window is slightly enlarged with a Kelly and a Foley probe number 18 is passed, entering through the previous left window and surrounding the uterus at the lowest level of the POSADAS ligature, leaving, the tip of the Foley from back to previous right window of the wide ligament, and performing tourniquet with Foley probe, knotting the Foley simple point and placing Kelly to block the knot and avoid loosening (Figure 7).



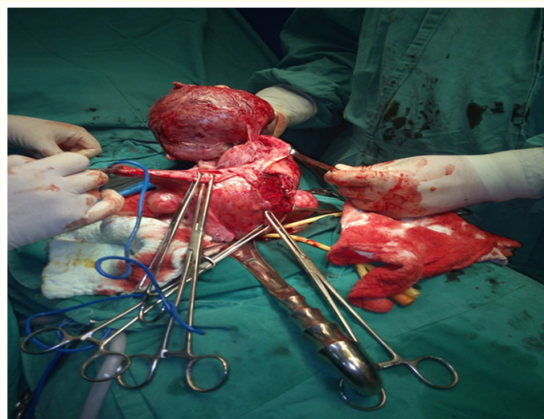
**Figure 7:** Shows Tourniquet through the wide ligament avascular window below the level of uterine artery ligation.

We proceed to place bulldog clamps, Heaney clamp covered the tips with Foley probe to avoid tissue trauma, are placed bilaterally at the level of the infundibulopelvic, bilateral ovarian branch taking care not to clamp ureter.

Having clamped the main vessels that irrigate the uterus. It is essential the previous mapping by the surgeon, this fundamental step will allow to plan the type of anterior or posterior incision, in our case it was longitudinal on the front and posterior face, central in the uterus (Figure 8,9).

Before making the uterine incision with electrocautery, we infiltrate bupivacaine plus epinephrine 2cc diluted in 200cc solution, for two purposes delimiting the dissection plane and promoting vasoconstriction, strict monitoring when infiltrating, sucking the syringe prevent direct application in a vessel. It is important Capnograph monitoring by anesthesiologist.





**Figure 8:** Shows the fibroid of large elements located uterine fundus. Anterior y posterior longitudinal uterine incision.



**Figure 9:** Shows extracted fibroids.

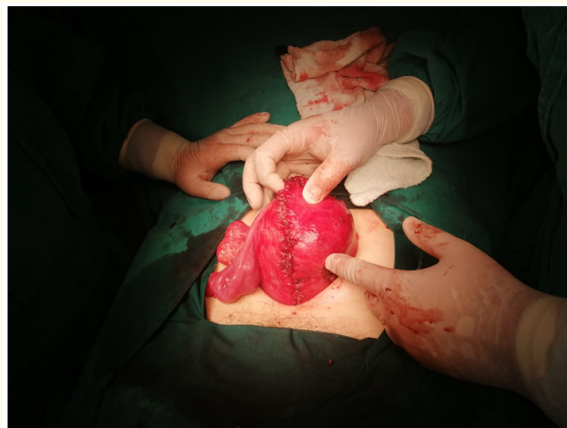
## Results

A total of 14 fibroids were extracted, the largest according to biopsy report measured 20 cm by 15 cm. Flat blunt dissection of the pseudocapsule was used, trying to remove the fibroids by the same two anterior and posterior incisions (Figure 9).

The trans surgical bleeding was 500 ml. Other measures used Transurgical were the use of Surgicell at the sites of the anterior and posterior incisions, anchored with two points to the serosa of the uterus with Chromic suture 2.0, to avoid slipping when the uterus enters the abdominal cavity.

Surgicell plays two purposes, hemostatic and prevention of post-surgical adhesions.

The uterus was reconstructed by planes, endometrium with 3.0 Vicryl separate points. Muscle plane with vicryl 0, Separate points, continuous Surget at serous plane level hidden points for adhesion prevention (Figure 10).



**Figure 10:** Shows final result reconstructed uterus with good hemostasis. Longitudinal anterior y posterior uterine incision.

It was placed Penrose drain at the bottom of Douglas sack with exteriorization to left iliac pit, we consider in this type of procedure always leave drain allows to identify an intrabdominal hemorrhage early.

Duration of the procedure was 160 minutes. second dose of prophylactic antibiotic was applied. Thrombophylaxis was not used in our case. Pre-surgical lower limb bandage was used.

It is essential to enter the operating room in this type of case, in the best conditions of the patient, without anemia. However, despite techniques to decrease bleeding, hematocrit decreased by 9% percent post-surgical.

The surgical evolution of the patient was satisfactory, not metabolic ileus data, the decrease of total hematocrit of 9%, of pre-surgical hematocrit, those lost by the drain was of low expenditure less than 100 ml of serohematic material, our patient presented a shock rate of 1 in the post-surgical and in conjunction with multi-disciplinary team decides to transfuse 1 globular package.

The result of Complete blood count BHC 24 hours' postsurgical reports leukocytosis of 24000 white blood cells with 90 segmented. without presenting any episode of fever, with a QUICK SOFA of 0 points, not sepsis data, however it was covered with ceftriaxone plus Clindamycin.

Patient was discharged at 72 hours, with control white blood cell count of 7600 white blood cells of 7600 with 78 segmented and a hematocrit of 34 percent.

There were no data from urinary tract infection or surgical wound infection, with no data from intra-abdominal hematoma or abscess within 14 days of point removal [3-6].

## Conclusion

Based on our results we consider that Myomectomy is an alternative to offer in cases of young women, without children, who wish to preserve their uterus, however, it is essential to map the fibroids, the pre-surgical planning, type of uterine incision to use, a detailed informed consent of the risks of the procedure. and above all enter the operating room in the best possible scenario, patient without anemia and with ready blood. Hematic losses are generally always underestimated.

DAUS Systematic Uterine Desarterialization, starting with ligation of uterine arteries with absorbable suture, using POSADAS technique, associated with the use of Foley probe tourniquet. Doing Synergy Effect with mechanical and pharmacological techniques, such as misoprostol 800 vaginal micrograms in this case, are the tools of the surgical medical arsenal that will allow a satisfactory result with lower rates of complications in large element fibroids.

She was followed with hysteroscopy evaluation 6 months after surgery, finding a cavity with moderate intrauterine adhesion not severe. Due to the age and history multiples fibroids. we consider referring her to an advanced reproductive center for ART.

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