Deeply Located Cul-de-sac Uterine Leiomyoma Resulting in Severe Pelvic Pain

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Received: August 21, 2020 Accepted: October 16, 2020

ABSTRACT

A Cul-de sac FIGO Type 7 uterine myoma presenting with severe pelvic pain removed laparoscopically without significant blood loss and discharged on second day without complication. On follow up in one month she was free from pain. Though the location of uterine myoma can be unwieldy, laparoscopic myomectomy is feasible with patience and proper technique to give benefits of minimal invasive surgery to the patient.

Keywords: laparoscopy, Myomectomy, Uterine Myoma

Citation: Agrawal A, Huang KG. Deeply Located Cul-de-sac Uterine Leiomyoma Resulting in Severe Pelvic Pain. Nep J Obstet Gynecol. 2020;15(31):127–129. doi: https://doi.org/10.3126/njog.v15i2.32925

INTRODUCTION

Most women with uterine myomas are asymptomatic and diagnosed incidentally; therefore, an observation and follow-up is often recommended to these women. [1] Depending on the size and location, symptomatic women may have pelvic pain, pressure and bulk symptoms or they may have menstrual problems like heavy menstrual bleeding or verities of abnormal uterine bleeding.[2] Some may present with infertility, reproductive problems and recurrent pregnancy loss (RPL). [3] Myomas may also be associated with pressure effects, leading to urinary symptoms. [4] Myomectomy is the treatment of choice for women who wants to preserve uterus. Although criteria exist for selection of patient for laparoscopic myomectomy, currently there are no limits to the size and location of myoma that can be operated laparoscopically as the expertise of surgeon improves. Uterine myoma is the commonest benign tumour in women accounting for 70% prevalence in white and 80% among black individuals.[5] It is a common benign uterine pathology among women seeking hysterectomy for pelvic pain. Size and location in the fibroid in the uterus can account for varied presentation of pelvic pain.

We describe a case of women with uterine myoma deeply impacted in posterior cul-de-sac and presented with severe pelvic pain managed by laparoscopic myomectomy.

CASE

A 40-year-old nulliparous female presented with severe lower abdominal pain with dysmenorrhea for one year in the Department of Obstetrics and Gynecology, Chang Gung Memorial Hospital at Linkou, Kweishan, Taoyuan, Taiwan. She didn't have any irregular or heavy menstrual bleeding. There were no other systemic symptoms. Pelvic examination revelled, uterus enlarged as 16 weeks gestational age with bulging and tenderness in posterior fornix. Lab investigation revealed normal haematology and biochemistry. Under the impression of uterine myoma, a pelvic and abdomen MRI was arranged to do precise myoma mapping as well as to rule out if there is any evidence of degeneration or sarcomatous changes. Sagittal and Axial T2 weighted

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MR images demonstrate an enlarged anteverted and retroflexed uterus with multiple T2 hypointense masses compatible with uterine fibroids. There was a subserosal fibroid (measuring 8.6 x 5.7 x 7.0 cm) arising from the posterior uterine wall, the bulk of which occupies the rectouterine pouch. Other multiple large uterine masses were three subserosal (6.3x4.2 x 5.0 cm, 4.6 x 3.9 x 4.0 cm, 10.3 x 5.7 x 5.4 cm) and intramural (4.9 x 4.3 x 5.9 cm) location. There is mass effect over the rectum in posterior aspect and the urinary bladder in the anterior aspect. [Figure-1 & 2]

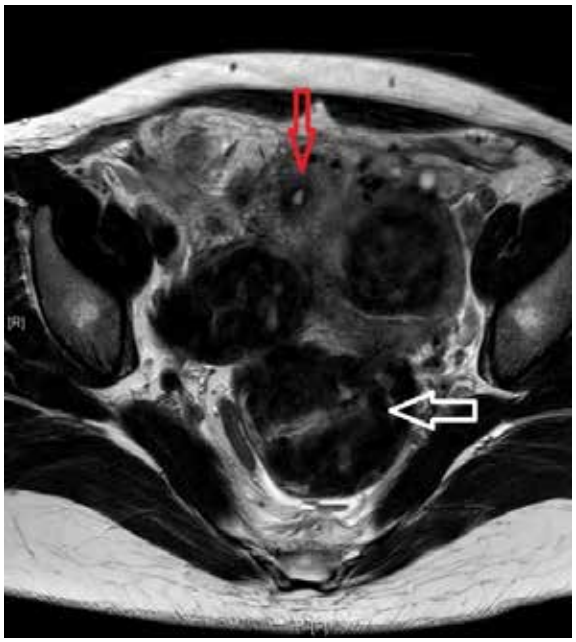

Fig-1. Transverse view of T2 weighted MRI shows FIGO Type-7 fibroid (white arrow) arising from the posterior uterine wall occupying the rectouterine pouch. Endometrial cavity shown with red arrow head

Fig-2. Sagittal T2 weighted MRI shows subserosal fibroid (8.6 x 5.7 x 7.0 cm) arising from the posterior uterine wall, occupying the rectouterine pouch (white arrow). Endometrial cavity (red arrow)

A few small loculated fluid collections also noted in the rectouterine pouch, immediately posterior to the subserosal fibroid, with layered contents possibly debris or blood products. Other subserosal and intramural fibroids are also seen.

Primary umbilical port was made with 10mm telescope and 3 ancillary lateral trocars. Intra operative finding was uterus enlarged with multiple myomas. There were multiple myomas - at left fundal area (10cm subserosal), at anterior wall (8cm and 7cm intramural), near the cervix (6cm and 5cm on left side), at right broad ligament deeply impacted in the posterior cul de sac and multiple small subserosal ones (n>5) seen at posterior wall. The challenging task to deliver out these myoma was possible with the use of combination of multiple laparoscopic instruments viz palpation probe, tenaculum, ligasure, scissors and graspers. [Figure-3]

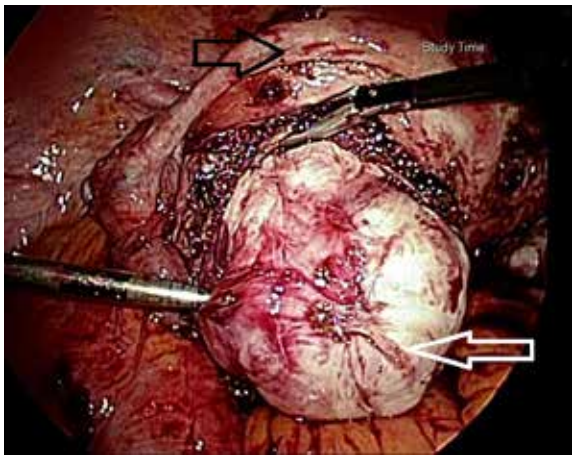

Fig-3. Laparoscopic Image of Myomectomy from Cul de Sac (white arrow) being performed (Black arrow-uterine fundus)

Total number of myomas removed were 12 and the weight of total specimen was 600gm. Bilateral adnexal grossly normal and free. Specimen was removed by manual morcellation from umbilical port. Total operative time was 210 minutes with blood loss of 200ml.

She had uneventful post-operative period and was discharged on 2nd post operative day. She followed up in outpatient after 1 month where she revealed being relieved of her chronic pelvic pain, which absolutely supported our management.

COMMENTS

Laparoscopic myomectomy for a large and deeply impacted myoma in posterior cul-de sac is challenging job as it creates surgical difficulties with mobilization and manipulation because of difficult approaching angle. But the studies have shown its role in large myoma despite prolonged operating time and blood loss. [6]

In the present case, one of the myoma of size 8.6 x 5.7 x 7.0 cm was deeply impacted in posterior cul de sac which was the reason patient presented with severe backache. Pre operative imaging with MRI had pointed out towards the mass effect of large myoma arising from posterior uterine wall to the rectum and lower part of spine. There is possibility of nerve compression by this deep impacted myoma which was causing excruciating pain to the patient. Rather than size, location was more significant in relation to pelvic pain. Myomectomy was possible with standard four port laparoscopy with use of uterine manipulator.

A population based study found no evidence of a relationship between pelvic pain and fibroid volume. [7] This study also found no evidence of the number of fibroids (up to four) having any effect on the level of pain. Demonstrating the location of fibroid is more accountable for pelvic pain symptoms.

CONCLUSIONS

Uterine fibroid can have various typical and atypical presentations. Despite the increased operation time and difficulty, laparoscopic myomectomy of deeply impacted myoma in cul-de sac could be safely performed in deeply impacted posterior cul-de sac myoma.

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