

Huge cervical leiomyoma presenting as an intra-abdominal leiomyoma: A case report

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Abstract

Leiomyoma is a very common tumour of the female pelvis. However it is very unusual for a cervical leiomyoma to present as an intra-abdominal tumour. This is a case report of a 41 year old para 5 woman who presented with an intra-abdominal tumour of about six months duration which was found to be a huge cervical leiomyoma 18cmx15cmx12cm at elective hysterectomy for uterine leiomyoma. In this case with such unusual presentation, myomectomy was performed before the deep pelvis could be adequately accessed for hysterectomy to be performed successfully without complications. The huge cervical leiomyomata found at laparotomy was not diagnosed as cervical leiomyomata after clinical examination and ultrasound scan investigations were completed. The post-operative follow-up has all been normal. *Conclusion:* Surgical procedures in the management of cervical leiomyoma can be difficult if the cervical leiomyoma is presenting unusually as a huge intra-abdominal tumour. The surgical procedure to be performed in such situation may not be routine but a special approach is required to avoid complications.

Keywords

Cervical Leiomyomata, Cervical Myoma, Cervical Fibroids, Uterine Leiomyoma

1. Introduction

Leiomyomas are benign tumours of muscles cell origin containing varying amount of fibrous tissue believed to have resulted from degeneration of some of the smooth muscle cells and are the most common tumours found in the female pelvis⁽¹⁾. Majority of leiomyomas originate from the uterus often referred to as 'uterine leiomyomas' however leiomyomas are not found exclusively in the uterus but also in other locations in the female pelvis including the broad ligament, round ligament, fallopian tubes and the cervix^(1,2). Some 5% of leiomyomas are thought to be originating from the cervix⁽¹⁾. Leiomyomas of the corpus of the uterus are multiple and more often located intramurally but cervical leiomyomas are usually solitary and large in size^(1,2). Large cervical leiomyomas may be attached to the cervix via a pedicle and prolapse into the vagina as a leiomyoma polyp and could grow large enough to occupy the whole of the true pelvis^(1,2). Majority of leiomyoma are asymptomatic; when

they become symptomatic they present with menorrhagia, dysmenorrhea^(1,3,4) and chronic pelvic pains resulting from pressure on pelvic structures or degeneration^(1,3,4). In this case, a huge cervical leiomyoma presented unusually as an intra abdominal tumour. The diagnosis of cervical leiomyoma was obscured until the time of laparotomy. Reporting the difficult surgical management of this case would share our experience in dealing with similar cases.

2. Case Report

A 41 year old para 5 was referred from a district hospital about 200 kilometers from our hospital with complaints of abnormal bleeding per vaginam, abnormal vaginal discharge, an abdominal mass and pelvic pains of about six months duration in August 2014. The referring diagnosis from the district hospital to the gynaecologist was abnormal uterine bleeding secondary to endometrial carcinoma after evaluating the patient. Six months prior to presentation at the district hospital she started feeling a mass in her lower abdomen with

abnormal bleeding per vaginam and vaginal discharge for which she sought herbal treatment. Her condition did not improve but she rather started experiencing abdominal pains a situation which compelled her to report to the district hospital from where she was subsequently referred.

She had no urinary symptoms and review of other systems was normal at the time of presentation to our facility. There was no family or medical history of significance. She lived with her husband and five children; four boys and a girl about three years old in a rural farming community in northern Ghana where their main occupation is peasant farming. She had spontaneous vaginal deliveries at term of all their children in the village without complications. She did not know her age at menarche but had a regular monthly cycle and bled for 3 to 4 days until the menses became irregular six months before her presentation. She also had intermenstrual bleeding and vaginal discharge in past one month without dysmenorrhea or dyspareunia. She did not practice any modern form of contraception and had not done any screening for cervical or breast cancer.

She looked ill but was not pale and without fever or jaundice, hydration state was good and her body mass index (BMI) was 21kg/m². Examinations of the cardiovascular and respiratory systems were all normal. The thyroid gland and breasts were normal with no peripheral lymph nodes palpable. The abdomen was soft and moved with respiration. There was a firm, moderately tender abdominal mass arising from the pelvis ≈20 week's gestational uterus. There was no sign of free fluid in the abdomen. The spleen, liver and both kidneys were also not palpable. On vaginal examination, the vulva was normal; the cervix was parous and had retracted abdominally with scanty sero-sanguineous discharge in the vagina. The cervix moved along when the mass was displaced cephalad. The pouch of Douglas was empty.

A provisional diagnosis of uterine leiomyoma was made to exclude endometrial carcinoma. She received counseling on surgical treatment after ultrasound scan diagnosis of uterine leiomyoma and consented to have total abdominal hysterectomy performed on her. Some other investigations including a full blood count, kidney and liver function tests were all normal. She was scheduled for total abdominal hysterectomy after anaesthetic review and other preoperative preparations were completed.

Surgical access into the abdomen was through a midline sub-umbilical incision as shown in figure 1. Access to the deep pelvis for total abdominal hysterectomy to be performed at this stage was limited due to the presence of a huge cervical leiomyoma. The uterus was without any leiomyoma and was displaced from the pelvis. Surgical removal of the huge cervical solitary leiomyoma nodule was done first by making a transverse incision superiorly on the serosa/peritoneum covering the leiomyoma and dissecting downwards to the point of its attachment onto the cervix where it was then excised. All active haemorrhage in the area of the incision was controlled by application of artery forceps and clamps followed by suturing. The redundant peritoneal tissue covering the leiomyoma was then excised and standard

procedure for total abdominal hysterectomy with conservation of both ovaries was then safely performed avoiding injury to the urinary system and bowels. Care was taken to identify the uterine vessels, the ureters and the cardinal ligaments which had all been displaced from their normal anatomic positions. The utero-sacral ligaments were also elongated and hypertrophied. Application of a tourniquet at the level of internal os during myomectomy to minimise blood loss was technically not possible here due to the location of the huge cervical leiomyoma as shown in figures 2-4. The summary of the findings at surgery included normal size uterus displaced superiorly by a huge solitary leiomyoma underneath the bladder peritoneum. The leiomyoma measured about 18cmx15cmx12cm and arising between the internal and external cervical os. The tubes and ovaries were normal and blood loss was about 400mls.

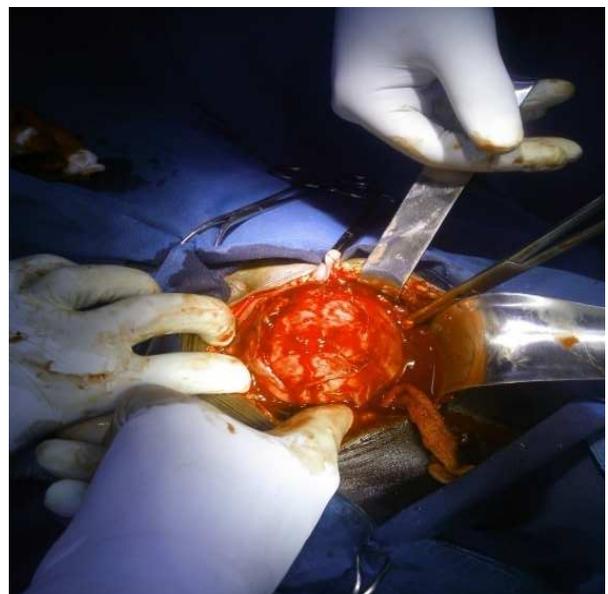


Figure 1. Midline subumbilical incision exposing the huge cervical leiomyoma

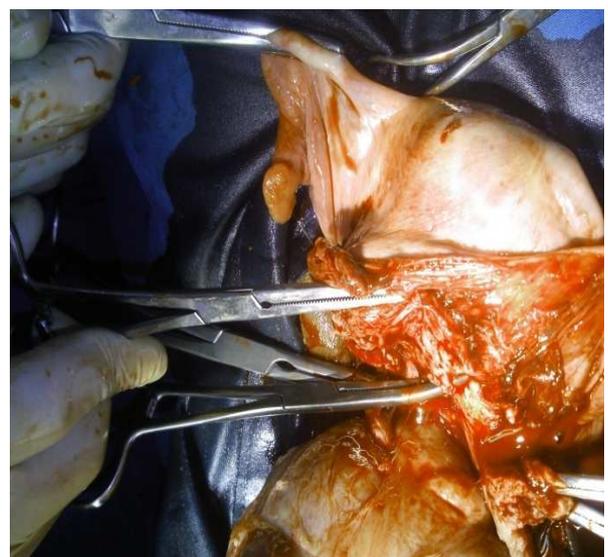


Figure 2. Peritoneum over the huge cervical leiomyoma separated

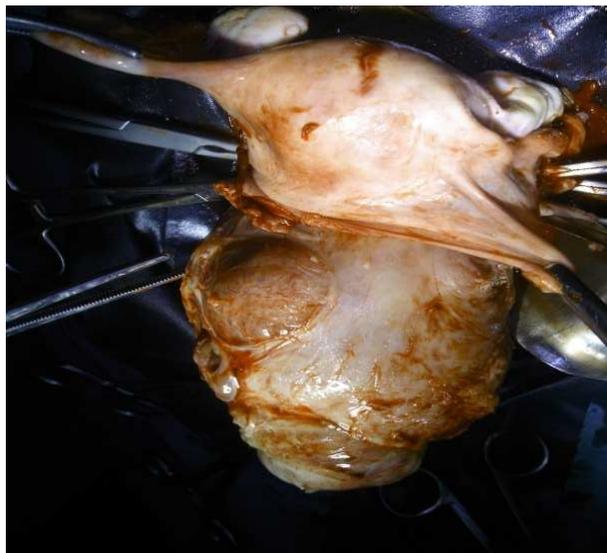


Figure 3. Huge cervical leiomyoma being removed

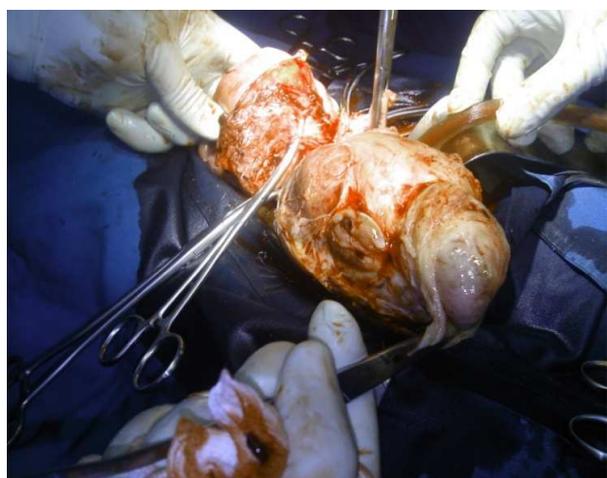


Figure 4. Huge cervical leiomyoma separated from the normal size uterus

Post-operatively she received adequate intravenous fluids and broad spectrum antibiotics for 24 hours, adequate pain management and continuous bladder drainage for 5 days. Recovery was satisfactory with normal vital signs, urine output and wound healing. She was discharged a week after the surgery on haematinics and a haemoglobin level of 9.3g/dl. She was subsequently discharged from the clinic after two months of normal follow-up review.

3. Discussion

This is a case report of a 41 year old para 5 with a huge cervical leiomyoma that presented as an intra-abdominal tumour which was managed successfully by sequential myomectomy and total abdominal hysterectomy with conservation of both ovaries.

Diagnosis of leiomyomas can be made following physical examination but a confirmation is usually sort with ultrasound scan when there is doubt about the diagnosis^(1,4). An ultrasound scan investigation is also useful for assessing the locations and sizes of the leiomyomas nodules⁽⁴⁾.

Ultrasound scan investigation failed to detect the extra-uterine location of the solitary leiomyoma due to the large size and direction of growth. The main symptoms of this patient included abnormal bleeding per vaginam, abnormal vaginal discharge, an abdominal mass and pelvic pain. She did not have the typical menstrual or urinary symptoms probably because the huge cervical leiomyoma's growth extended into the abdomen instead of presenting as prolapsed submucosal or prolapsed cervical leiomyoma. The growth was mainly in the abdominal direction from its attachment on the cervix between the internal and external os and not into the vagina.

Hysterectomy and myomectomy are the commonest surgical procedures performed for uterine leiomyoma. The permanent treatment for a symptomatic leiomyoma in a woman who has completed her family is hysterectomy^(1,3,5). The patient consented for hysterectomy after counselling because the leiomyoma was very symptomatic and she did not want to have any more children. However findings at surgery made it necessary to first perform myomectomy before hysterectomy could be performed as access to the deep pelvis was limited. It became necessary to perform excision of redundant serosal/peritoneal tissue that covered the myoma and identifying the displaced pelvic organs such as ureters, bladder and bowels to minimize the risk of injury. Leiomyoma arising from the cervix and growing into the abdomen from the posterior or pouch of Douglas, the lateral sides or low in the broad ligaments, the anterior part of the cervix as in this case reported would require a special approach in removing these leiomyomas without placement of a tourniquet at the level of the internal os to minimize blood loss as is the routine practice. Access would be limited by the direction of growth and large size of the leiomyomata arising low in the pelvis. The risk of injury to the bowels and urinary system and hemorrhage is high in such cases; minimizing blood loss and avoiding injury must both be achieved in surgical treatment of myomas in such inaccessible locations. A good approach could be extracting these low or cervical nodules through a superior incision made on the serosa or overlying muscles to have needed access to remove the leiomyoma nodules as was done in this case. Any active haemorrhage due to the incision should be controlled by application of artery forceps, clamps or suturing which are available immediately as was done in this case. After removal of the low leiomyoma limiting access to the internal cervical os; a tourniquet could then be applied to further control haemorrhage before suturing to close the incisions if haemorrhage is still a problem. In the case reported bleeding was minimal due to the subserosal location of the huge leiomyoma and timely application of artery forceps and clamps on the uterine vessels and other bleeding vessels.

Since our patient was in early forties removing her ovaries would have been premature as that results in surgical menopause which may require hormone replacement therapy so both ovaries were conserved because they looked grossly normal.

4. Conclusion

Surgical procedures in the management of cervical leiomyoma can be difficult if the cervical leiomyoma is presenting unusually as a huge intra-abdominal tumor. The surgical procedure to be performed in such situation may not be routine but a special approach is required to avoid complications.

References

- [1] Droegenmueller W. Benign Gynecologic Lesions. In: Stenchever MA, Droegenmueller W, Herbst AL, Mishell DR, editors. *Comprehensive Gynecology*. St. Louis: Mosby; 2001; 479-530.
- [2] Shwatz SM. Epidemiology of uterine leiomyomata. *Clin Obstet Gynecol* 2001; 44: 316-26.
- [3] Zimmermann A., Bernuit D., Gerlinger C., Schaefer M., Geppert K. Prevalence, symptoms and management of uterine leiomyomas: an international internet-based survey of 21,746 women *BMC Women's Health*; 2012, 12:6 doi:10.1186/1472-6872-12-6
- [4] Parker WH. Etiology, Symptomatology and diagnosis of uterine myomas. *Fertil Steril* 2007, 87(4):725-36.
- [5] Parker WH. Uterine myomas: management. *Fertil Steril* 2007, 88(2):255-71.