

Giant cervical myoma associated with urinary incontinence and hydroureteronephrosis

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Summary

Cervical leiomyomas compromise fewer than 5% of all uterine leiomyomas. Cervical myomas exacerbates surgical difficulties, such as poor operative field, difficult suture repairs, and blood loss. When performing myomectomy for cervical myomas, care must be taken to avoid injuries to neighboring structures in the pelvic cavity. These structures include the bladder in front of the cervix, the rectum behind the cervix, and the uterine arteries and ureters on both sides. Myomectomy for cervical myoma is empirically difficult and frequently problematic. The authors report a case of giant cervical myoma presenting with urinary incontinence.

Key words: Cervical myoma; Hydroureteronephrosis; Urinary incontinence.

Introduction

Uterine myoma is a common gynecological disorder occurring in 20-50% of women, of late reproductive age. A majority of myomas are associated with uterine corpus. Cervical myomas account for less than 5% of uterine myomas [1]. The uterine cervix is adjacent to the uterine arteries, ureters, rectum, and bladder. Therefore, cervical myomectomy has the surgical limitations of poor operative field, and vulnerability of the neighboring organs to injury [2]. The authors report a case of giant cervical myoma presenting with urinary incontinence.

Case Report

A 51-year-old woman was admitted to the present clinic with ongoing urinary incontinence for two months. A solid mass was revealed extending to the umbilical level in bimanual examination. Cervix could not be recognized due to the compression and distortion of the mass. Ultrasonography showed vesical globe and bilateral hydroureteronephrosis and 1,500 cc of urine was drained via a foley catheter. MRI showed a cervical mass measuring 19x11x10 cm that compressed the posterior portion of the bladder (Figure 1). Uterus and cervical myoma was removed by laparotomy through a midline incision (Figure 2). Myomectomy cavity was sutured without leaving empty space after bleeding control. Bilateral hydroureteronephrosis and incontinence regressed in the post-operative period. Patient was discharged on the fifth postoperative day without any complications.

Discussion

Cervical leiomyomas compromise fewer than 5% of all uterine leiomyomas. They may be categorized as those that occur at a subserosal location (i.e., extracervical

type) and those that occur within the cervix (i.e., intracervical type) [3]. Most patients with uterine myomas are symptom-free. When symptoms occur, they usually correlate with the location of the myomas, their size, or concomitant degenerative changes. As myomas grow, pressure is exerted on adjacent viscera with manifestations from the urinary tract, such as frequency, outflow obstruction, and compression of the ureters. Gastrointestinal symptoms such as constipation or tenesmus may be the result of a posterior wall myoma that is exerting pressure on the recto-sigmoid [4]. Cervical myomas exacerbates surgical difficulties, such as poor operative field, difficult suture repairs, and blood loss. When performing myomectomy for cervical myomas, care must be taken to avoid injuries to neighboring structures in the pelvic cavity. These structures include the bladder in front of the cervix, the rectum behind the cervix, and the uterine arteries and ureters on both sides. Myomectomy for cervical myoma is empirically difficult and frequently problematic [5]. The most difficult part of cervical myomectomy is suturing the base of the wound following enucleation. Complete dissection of the surrounding organs such as the bladder and ureter near the base of the wound, is difficult. Bleeding makes the visual field difficult to maintain; thereby increasing the possibility of damage during suturing [6].

Surgical excision of cervical myomas can be performed through laparotomy or laparoscopy. The present authors preferred laparotomy due to the extreme size of the myoma. Paying attention to the relationship between fibroids and adjacent organs, to avoid damage to those organs through careful dissection and suturing from the

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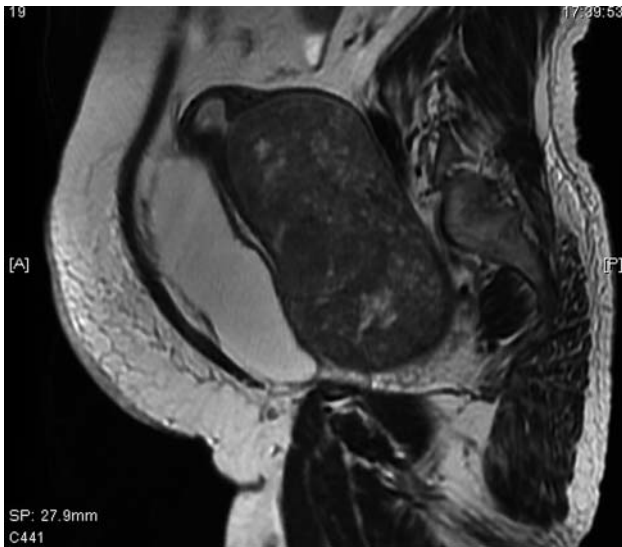


Figure 1. — Sagittal T2 weighted magnetic resonance image of the pelvic region. A large cervical myoma is seen, elevating the uterus.

base of the myomectomy cavity, without leaving empty space after bleeding control, are important factors in reducing morbidity.

References

- [1] Patel P., Banker M., Munshi S., Bhalla A.: "Handling cervical myomas". *J. Gynecol. Endosc. Surg.*, 2011, 2, 30.
- [2] Lee S.Y., Lee H.S., Cho Y.J., Joo K.Y.: "Laparoscopic cervical myomectomy: Five years of experience". *Korean J. Obstet. Gynecol.*, 2012, 55, 493.
- [3] Kim M.D., Lee M., Jung D.C., Park S., Lee M.S., Won J.Y., Lee D.Y., Lee K.H.: "Limited efficacy of uterine artery embolization for cervical leiomyomas". *J. Vasc. Inter. Radiol.*, 2012, 23, 236.
- [4] Wallach E.E., Vlahos N.F.: "Uterine myomas: an overview of development, clinical futures, and management". *Obstet. Gynecol.*, 2004, 104, 393.
- [5] Chang W.C., Chen S.Y., Huang S.C., Chang D.Y., Chou L.Y., Sheu B.C.: "Strategy of cervical myomectomy under laparoscopy". *Fertil. Steril.*, 2010, 94, 2710.
- [6] Matsuoka S., Kikuchi I., Kitade M., Kumakiri J., Kuroda K., Tokita S., et al.: "Strategy for laparoscopic cervical myomectomy". *J. Minim. Invasive Gynecol.*, 2010, 17, 301.



Figure 2. — Pathological specimen of cervical myoma.

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