

Acute urinary retention secondary to a cervical leiomyoma: a case report

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Abstract

Background: The incidence of both acute urinary retention and cervical leiomyoma is extremely rare in women of reproductive age group. **Case:** We report a case of 40 year old multiparous woman with the complaints of acute retention of urine and bleeding per vaginam. The retention of urine was relieved by administering the Foley's catheter. On per speculum examination a fleshy, globular mass protruding from the vagina was seen. On bi-manual examination uterus was enlarged, but cervix could not be felt except a rim of the cervix because the whole of the cervix was occupied with the mass. Ultrasonography findings revealed that cervical fibroid of size 10x10x8cm with normal sized uterus and adenexa. Total abdominal hysterectomy was done. On gross pathology uterus was normal in size, whereas cervical leiomyoma of size 12x10x8cm was arising from the posterior aspect of the cervix. The post operative period was uneventful and there was no urinary retention after operation. **Conclusion:** Cervical leiomyomas may cause acute retention of urine among reproductive age women without other etiologies. The urinary symptoms completely resolved after total abdominal hysterectomy.

Keywords: Acute urinary retention, cervical leiomyoma.

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smooth muscle cells often manifests as menstrual abnormalities, dyspareunia, post coital bleeding and rarely manifest as urinary retention.³ We report a rare case of cervical leiomyoma causing urinary retention.

CASE REPORT

A 40 year old multiparous woman presented with acute retention of urine and associated bleeding per vaginam was first reported to a practicing gynecologist of the town. The retention of urine was relieved by administering the Foley's catheter. She also got transfused with one unit of packed cell and referred to the department of obstetrics and gynecology, Prathima Institute of Medical Sciences, Karimnagar for further evaluation and management. On examination, she had pallor, pulse rate was 86/minute and blood pressure was 100/70 mmHg. There was tenderness over the lower abdomen. On per speculum examination a fleshy, globular mass protruding from the vagina was seen. On bi-manual examination uterus was enlarged, but cervix could not be felt except a rim of the cervix because the whole of the cervix was occupied with the mass. On investigation, hemoglobin was 6.3 gm % with total

INTRODUCTION

Acute urinary retention is a failure of voluntary voiding resulting in painful bladder distention.¹ The causes of acute urinary retention in women are multifactorial and broadly categorized as obstructive, infective, pharmacological, neurogenic, myopathic and functional.¹ The incidence of urinary retention is rare among women of reproductive age. The most common causes of obstructive retention are gynecological surgeries and impacted pelvic masses or gravid uterus.² Cervical leiomyomas are benign, monoclonal tumors of the

leukocyte count of 20000/cmm. Ultrasonography findings revealed that cervical fibroid of size 10x10x8cm with normal sized uterus and adenexa. The patient was given 2 days of injectable antibiotics and one unit of packed cell and posted for total abdominal hysterectomy. Uterus was normal in size and with normal adenexas. Total abdominal hysterectomy was done. Intraoperatively 3



Figure 1: Gross specimen of cervical leiomyoma arising from posterior aspect of cervix



Figure 2: Cut section of cervical leiomyoma showing whorled appearance

DISCUSSION

Uterine fibroid is a significant cause of concern in women of reproductive age. The estimated prevalence uterine fibroid ranges from 5% to 21% across different counties.⁴ Of the total cases, cervical leomyomas are rare and accounted for 1- 2% of uterine leomyoma. Cervical leomyomas develop in the wall of cervix and can alter the shape and size of the cervix. Large sized leomyomas can exert pressure on the bladder and may manifest as partial or complete retention of urine.³ Over distention of the bladder may cause ischemia of destrutor and later on leading to urinary tract infection.⁵ The diagnosis depends on the clinical evaluation of the patient. A transvaginal USG is indicated to confirm a pelvic mass compressing the bladder.⁶ In some cases MRI is diagnostic. Cystoscopy is indicated in localizing bladder pathology. The treatment of acute retention is catheterization followed by definitive treatment of the pelvic mass. If the underlying cause is pelvic mass, hysterectomy is the first line management although myomectomy, uterine artery embolisation and GnRH agonist therapies have been tried as well.⁵ In the present case we performed a successful total abdominal hysterectomy with uneventful post-operative period.

CONCLUSION

Cervical leiomyomas may cause acute retention of urine among reproductive age women without other etiologies. The urinary symptoms completely resolved after total abdominal hysterectomy.

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