

Unusual presentation of a dermoid cyst that derived from the bladder dome presenting as subserosal leiomyoma uteri

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Summary

Background: Dermoid cysts are benign neoplasms deriving from ectoderm and mesoderm and can be found in a variety of locations. Uterine leiomyomas are benign tumors that grow within the muscle tissue of the uterus. Only a few cases have been reported and cited in the literature on dermoid cysts of the urinary bladder, and can be confused with urogenital masses. This paper reports the first case of a dermoid cyst deriving from the bladder dome presenting as subserosal uterine leiomyoma. **Case:** A 44-year-old woman was admitted with a history of chronic pelvic pain. After gynecological examination and ultrasonography a subserous uterine myoma was suspected. Tumor resection was performed and the histopathological diagnosis was a dermoid cyst. **Conclusion:** To our knowledge this is the first case report of a woman with a dermoid cyst presenting as a subserous uterine myoma.

Key words: Dermoid cysts; Bladder dome.

Introduction

Dermoid cysts are benign neoplasms that contain structures such as hair, fluid, teeth, or skin glands and are derived from ectoderm and mesoderm. Dermoid cysts can be found in a variety of locations such as the mouth, head, spine, and ovary, and sometimes can be difficult to distinguish from other more common benign masses [1].

Uterine leiomyomas are benign tumors that grow within the muscle tissue of the uterus. Between 20-50% of women of childbearing age have uterine fibroids. They may be subserosal, intramucosal, or submucosal in location within the uterus [1].

Dermoid cysts of the urinary bladder can be confused with urogenital masses and only a few cases have been reported and cited in the literature [2, 3].

This paper reports the first case in which a dermoid cyst deriving from the bladder dome presenting as a subserosal uterine leiomyoma was treated surgically.

Case Report

A 44-year-old woman was admitted with a history of chronic pain with severe dysmenorrhea and lower abdominal pressure. Her past medical history included no operation or systemic illness. On general examination, she was afebrile with a blood pressure of 100/60 mmHg and a pulse rate of 80 beats/min. Abdominal examination was normal. On gynecologic examination, the vulva, vagina and cervix were normal and a 10×10 cm pelvic mass originating from the uterus was noted. Ultrasonographic examination revealed a 10×10×10 cm subserosal uterine mass originating from the uterus. The patient was diagnosed as having a subserosal uterine myoma. Her hematologic

workup demonstrated hemoglobin = 12.3 g/dl, hematocrit = 37.7%, WBC = 8.41 K/ul, and platelet count = 323,000 10³/ul. Surgical management was planned to relieve the symptoms of pelvic pain due to the mass. The patient was taken to the operating room and after exploratory laparotomy, a 10×10×9 cm solid pelvic mass was identified originating from the bladder dome (Figure 1). Solid mass excision was performed. The patient was discharged home in good general condition three days after surgery and the histopathological diagnosis after the operation was a dermoid cyst.

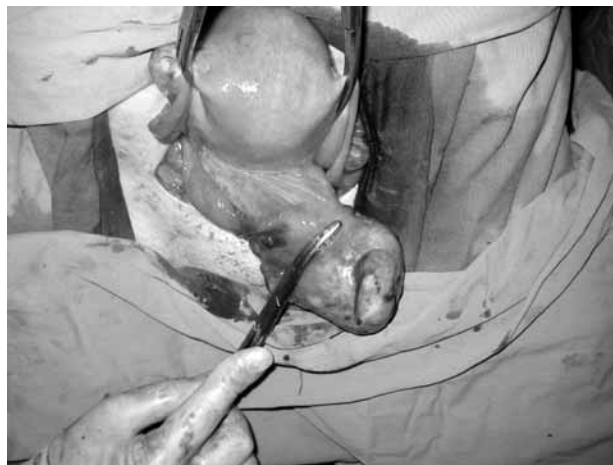


Figure 1. — Intraoperative view of the dermoid cyst deriving from the bladder dome.

Discussion

Bladder dermoid is a rare presentation and there are few cases in the literature [3-6]. Okeke *et al.* described a dermoid cyst of the urinary bladder as a differential diagnosis of bladder calculus [3], Agrawal *et al.* presented a

case of a dermoid cyst of the bladder in which the diagnosis was made cystoscopically and confirmed histopathologically [3]. Agbreta *et al.* described a dermoid cyst of the urachus [4]. Kamimura *et al.* presented a 46-year-old man complaining of transient dysuria who underwent retrovesical tumor resection and the histopathological diagnosis showed a dermoid cyst [5].

Subserous uterine leiomyomas are located beneath the serosal surface. They grow out toward the peritoneal cavity, and can be broad-based or pedunculated. The pedunculated ones may attach themselves to adjacent structures like the bowel and omentum, and develop a secondary blood supply. Subserous leiomyomas should be considered in the differential diagnosis of benign and malign pelvic masses [1].

We have described the case of a 44-year-old woman with a dermoid cyst that derived from the bladder dome presenting as a subserous uterine myoma, which to our knowledge is the first report of a woman with a dermoid cyst presenting as a subserous uterine myoma.

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