RESIDENT'S CORNER

Aggressive angiomyxoma of the epididymis

Mohammad Al-Omar, MD,¹ Kevin Kwan, MD,¹ Edward Tweedie, MD,² Patrick P. W. Luke, MD¹

¹Division of Urology, London Health Sciences Centre, University of Western Ontario, London, Ontario, Canada ²Department of Pathology, London Health Sciences Centre, University of Western Ontario, London, Ontario, Canada

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Aggressive angiomyxoma is a rare locally invasive nonmetastasizing soft tissue neoplasm that is most commonly

Introduction

Aggressive angiomyxoma (AAM) is a rare locally invasive soft tissue neoplasm that usually arises in the female perineum and pelvis. While there have been reports of scrotal and AAM of the spermatic cord in males, up to now, AAM has yet to be described in the epididymis.¹⁻³

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Address correspondence to Dr. Patrick P. W. Luke, London Health Sciences Centre, University Campus, 339 Windermere Road, London, Ontario N6A 5A5 Canada located in the female pelvis and perineum. We report a case of aggressive angiomyxoma arising from the epididymis of a young male, which was treated by radical orchiectomy.

Key Words: paratesticular tumors, epididymis, angiomyxoma

Case report

A 35-year-old man presented with a 1-year history of a painless slowly growing left scrotal mass. There was no history of epididymitis, trauma or cryptorchidism. The patient was on peritoneal dialysis for end-stage renal disease secondary to membranous glomerulonephritis. Physical examination revealed a normal right testis and a left-sided soft tissue mass that was inseparable from the left testis. There was no evidence of lymphadenopathy and the remainder of the physical exam was normal. Doppler ultrasound demonstrated a left 9 cm x 5 cm x 3 cm hypovascular mass involving the epididymis and testicle. The contralateral intra-scrotal contents were normal. Chest x-ray and tumor markers including α -fetoprotein (< 5 ug/l) and β -human chorionic gonadotropin (4.8 U/l) levels were within normal limits.

Left radical orchiectomy was performed. The mass was adherent to the left testicle and epididymis but not to the cord or scrotum. Histological evaluation demonstrated that the tumor had arisen from the epididymis without invading the testis, Figure 1. It consisted of predominantly myxoid extracellular material. There were stellate and spindle shaped fibroblasticlike stromal cells and a network of small blood vessels coursing throughout the lesion, Figure 2. Immunohistochemistry showed the stomal cells to be focally positive for desmin and CD34 but diffusely positive for vimentin. These cells were negative for actin and S100 protein. These histopathologic characteristics confirmed the diagnosis of AAM arising from the left epididymis.

Although AAM rarely metastasize, yearly



Figure 1. Gross specimen: Testis (arrow) nearly surrounded by a soft, 9 cm diameter, mass.



Figure 2. Light microscopy: Hypocellular neoplasm consisting of small blood vessels (large arrow) with a background of myxoid stroma with spindle-shaped and stellate mesenchymal cells (small arrow) (hematoxylin and eosin, 200X magnification).

computer tomographic (CT) imaging of the patient's abdomen and pelvis were performed along with physical examination every 3 months. Over 3 years, there has not been any recurrence of disease.

Discussion

Up to now, a total of 45 cases of AAM have been reported, 15 of which were in men. AAM have been documented to arise from the perineum, spermatic cord and scrotum as well as other pelvic soft tissue structures, but has yet to be described in the epididymis. To our knowledge, this report represents the first documented case of AAM of the epididymis.

Clinically, AAMs are slow growing locally infiltrative benign tumors that seldom metastasize, but are associated with a high risk of local recurrence (36%-72%).² Successful treatment necessitates wide excision with tumor free margins and frequent post-operative re-evaluation due to its tendency to recur.

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