Aggressive Angiomyxoma of the prostate gland

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Abstract
Angiomyxomas are uncommon benign lesions usually involving pelvic and perianal structures. Angiomyxomas are uncommon in males as compared to females and angiomyxomas arising from the prostate gland are even rarer. Only three cases of prostatic aggressive angiomyxoma have been described in English literature till date. To the best of our knowledge, our case is the fourth case to be reported. We present a case of an elderly gentleman with an aggressive angiomyxoma of the prostate. CT scan and MRI were performed for the patient, who subsequently underwent surgery and presented back to our hospital with a recurrence.

Keywords: Angiomyxoma; Prostate; Aggressive.

INTRODUCTION
Aggressive angiomyxomas are rare locally aggressive benign neoplasms commonly occurring in the pelvic and perineal regions of females. They are even more rarer in males especially those tumors arising from the prostate. We report the case of a 40-year-old gentleman who presented with recurrent aggressive angiomyxoma of the prostate.

CASE REPORT
A gentleman aged 40 years had come to our hospital with obstructive urinary symptoms. He was a well-built healthy adult with no previous significant medical history. General examination revealed no significant findings. Per rectal examination revealed a hard mass in the prostatic region. Ultrasound examination revealed a lobulated, heterogeneously hypoechoic mass in the pelvis causing superior displacement of the urinary bladder. Prostate gland could not be separately visualized from the mass. Following the ultrasound, a contrast enhanced CT scan was performed which revealed a heterogeneously hypodense mass lesion in the pelvis, with no calcifications, hemorrhage or fat densities (Figure 1). The urinary bladder was significantly displaced superiorly. The prostate was not separately visualized and the mass appeared to be arising from the prostate thereby displacing the urinary bladder superiorly. There was no infiltration of urinary bladder or rectum. An MRI was also performed which revealed similar findings and the mass lesion was hyperintense on T2W sequences (Figure 2, 3). There was significant stretching of the prostatic urethra with the bladder displaced into the supra-umbilical region. There was no significant loco-regional adenopathy. The patient was operated upon with complete Removal of the mass, and the final histopathology revealed an aggressive angiomyxoma of the prostate gland. The patient was asymptomatic for 1 year after which he started developing obstructive urinary symptoms once again. An ultrasound was performed which revealed an ill-defined heterogeneously hypoechoic mass in the pelvis suggestive of recurrence. A CT scan was done, which revealed a heterogeneously enhancing pelvic mass causing superior displacement of urinary bladder with imaging morphology similar to pre-operative scans (Figure 4, 5).

DISCUSSION
Aggressive angiomyxomas were first reported in 1983 by Steeper and Rosai in a female patient [1]. These tumors have a predilection for perineal and pelvic regions. In females they can arise in vulva, vagina, labia, buttock and inguinal regions. In men they can occur anywhere in the pelvic and perineal regions. There are case reports of occurrence of this tumor in the scrotum, epididymis, spermatic cord, retroperitoneum, retro-vesical area, prostate and inguinal regions [2]. Till date only 3 cases of prostatic aggressive angiomyxoma have been reported in English literature. Though AAM's are benign, they are described as aggressive in view of high recurrence rate. The recurrence rate is as high as 36-72%. [1]. Recurrences commonly occur within the first three years of diagnosis, however recurrences even after a span of 14 years have been reported [4].

On imaging, AAM's are usually large lobulated heterogeneously enhancing soft tissue density masses with relatively well maintained adjacent fat planes and no significant regional lymphadenopathy. Calcifications and hemorrhages are usually not seen.

On MR imaging these lesions are predominantly hypointense on T1W images and hyperintense on T2W images. T2 hyperintense signals are due to myxoid nature and high 5 .

water content of the lesion. [3] Pathologically AAM needs to be differentiated from other myxoid tumors like neurogenic lesions, stromal tumors of prostate, myxomas, angiomyofibroblastoma, myxoid variant of liposarcomas, myxoid malignant fibrous histiocytoma and variants of embryonal rhabdomyosarcoma. [5].

CONCLUSION
Aggressive angiomyxomas are benign tumors of mesenchymal origin, commonly occurring in the pelvic and
perennial regions of females, and occurring less commonly in men. Despite complete surgical resection recurrence rate is high.

REFERENCES


