PROSTATE DFP
CASE OF THE WEEK
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HISTORY

• 44 year old man presents with two episodes of gross hematuria & hematospermia

• No other significant past medical or surgical history

• Patient underwent multi-parametric imaging of his prostate
MRI PROSTATE FINDINGS

- No findings suspicious for prostate neoplasm.
- There are no focal T2 abnormalities in the peripheral gland or central gland. No focal areas of restricted diffusion abnormality noted. No enhancement abnormalities identified.
A 4.9 x 4.5 x 4.6 cm hemorrhagic cystic mass in noted in the left seminal vesicle (yellow arrows).

A focal heterogeneous cystic and solid component is noted anteriorly, measuring 2.3 x 1.8 x 2.7 cm (red arrows) showing mildly restricted diffusion and heterogeneous post contrast enhancement.
• An uncomplicated CT-guided biopsy of the complex nodule within the left seminal vesicle cystic mass was performed
GROSS PATHOLOGY

• Gross examination showed a 4.8 x 2 x 1.5 cm multiloculated hemorrhagic cystic lesion with firm tan/yellow solid areas.
• Microscopic H and E examination (above) showed proliferation of benign appearing cystic glands lined by cuboidal epithelium (black arrow) and cellular stroma composed of bland spindle cells with elongated nuclei (green arrows). Mitosis, nuclear atypia, and necrosis were not identified.

• ER Immunostain: Stromal cells are positive for Estrogen receptors
PATHOLOGY DIAGNOSIS: MIXED EPITHELIAL-STROMAL TUMOR (MEST) OF THE SEMINAL VESICLE
MEST

• IN CONTRAST TO THE PROSTATE GLAND SEMINAL VESICLES DEMONSTRATE LOW POTENTIAL FOR NEOPLASM

• OF THE RARE PRIMARY SEMINAL VESICLE TUMORS, ADENOCARCINOMA IS THE MOST COMMON, BUT THERE ARE ALSO RARE SEMINAL VESICLE NEOPLASMS WHICH DEMONSTRATE EPITHELIAL AND STROMAL COMPONENTS.


• THE SPECTRUM OF REPORTED MIXED EPITHELIAL-STROMAL TUMORS (MEST) OF SEMINAL VESICLE ENCOMPASSES LOW, INTERMEDIATE AND HIGH- GRADE TUMORS CONTAINING HYPERCELLULAR STROMA, COMPOSED OF UNIFORM SPINDLE CELLS, ARRANGED IN FASCICLES & INTERSPERSED BETWEEN THE GLANDS. WORRISOME MORPHOLOGY, SUCH AS INfiltrATIVE MARGIN, CELL ATYPIA, INCREASED MITOTIC ACTIVITY AND NECROSIS ARE RARE.

• THE STROMAL CELLS ARE REACTIVE FOR ESTROGEN AND PROGESTERONE RECEPTORS, AND DESMIN.
SUMMARY

- While multiparametric prostate MRI is performed to diagnose and guide staging of prostate cancer, significant incidental pelvic lesions may be discovered, including lesions within the seminal vesicles.
- Overall, primary neoplasms of the seminal vesicles are very rare, with adenocarcinoma being the most common.
REFERENCES


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