What a Radiologist Needs to Know: Evaluation of Hematospermia with Magnetic Resonance Imaging

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Purpose:

Hematospermia (HS) is often times an anxiety provoking idiopathic self limiting condition. However, MRI plays an important role in diagnostic work up of men with persistent hematospermia.

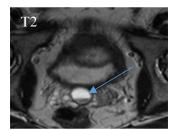
To discuss potential etiologies, diagnostic work up, imaging techniques and appearance of associated pathologies.

Methods: This presentation will include a review of MR examination of patients to evaluate anatomical, congenital and pathological causes in patients with persistent HS under and over 40 years age of males. Pelvic MRI will be performed using a dedicated protocol with and without contrast.

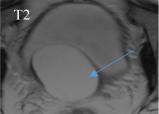
Discussion: HS is idiopathic, self limiting anxiety provoking condition in young males which requires reassurance. However, in cases of persistent HS, MRI plays an important role to evaluate conditions such as inflammation/infection (including cystitis, epididymo-orchitis, prostatitis, prostatic abscess), congenital conditions (seminal vesicles cyst, mullerian duct cyst, ejaculatory duct cyst etc.,) neoplastic conditions (including testicular, prostate, bladder and urethral cancer) and iatrogenic causes such as prostate biopsy, which is by far the most common cause of HS in older patients.

Conclusions: MRI is superior to other imaging modalities for diagnosis of persistent HS due to its superior soft tissue contrast, multiplanar capabilities and ability to resolve small caliber structures e.g. ejaculatory ducts, vasa deferentia and internal architecture of prostate in both young and older patients.

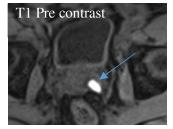
Participants will gain an appreciation for the wide variety of conditions encountered in HS on MRI imaging.



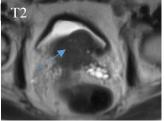
Mullerian duct cyst



Seminal vesicle cyst



Seminal vesicle hemorrhage following prostate biopsy



Invasive prostate carcinoma

References:

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Han P, Dong Q, Shi M, Yang YR, Wei Q. Seminal vesicle cyst and ipsilateral renal agenesis: laparoscopic approach. Archives of andrology 2007; 53:285-288

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