Spacer migration into anterior peripostatic venous plexus of Santorini

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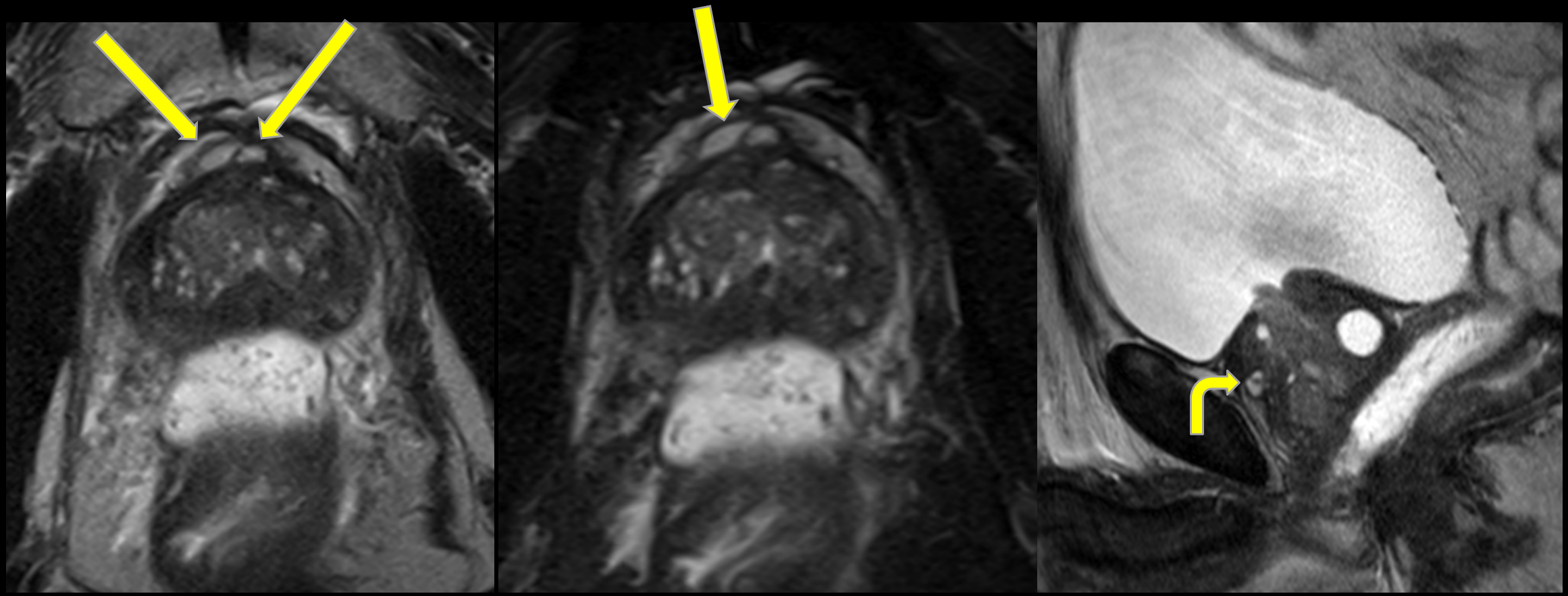
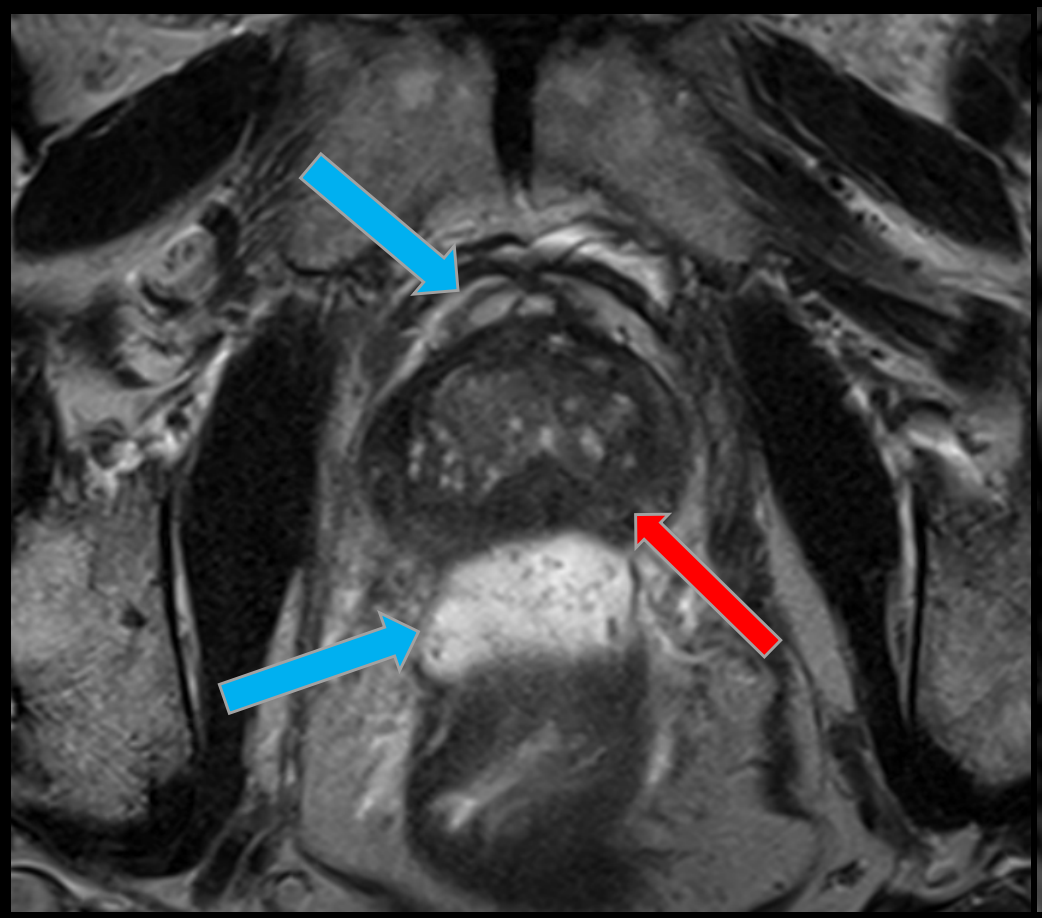
Case Report

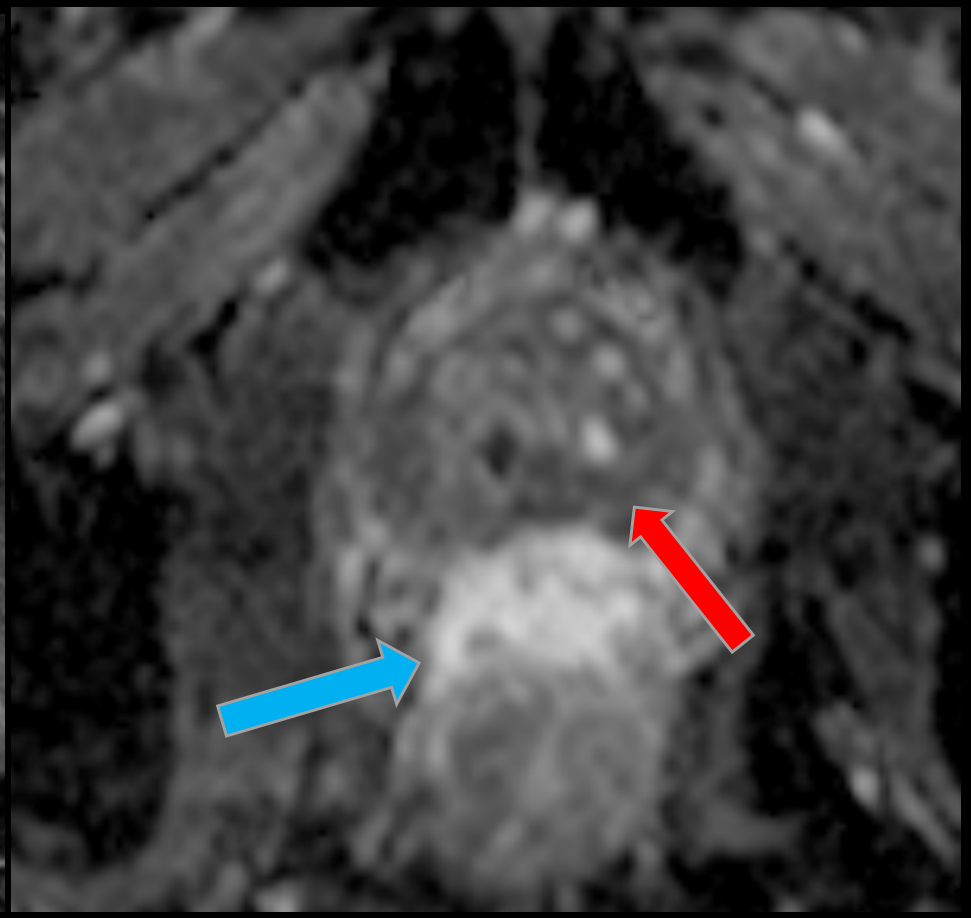
- A 83 year-old-male with elevated PSA 20 ng/ml
- Recent biopsy proven prostate cancer Gleason score **3 + 4 = 7**
- Awaiting external beam radiotherapy underwent transperineal ultrasound guided placement of Space OAR hydrogel

Hydrogel spacer migration into the anterior periprostatic venous plexus (Santorini's plexus)



Biopsy left lateral mid gland (arrow) demonstrated biopsy proven Prostatic adenocarcinoma, Gleason score 3 + 4 = 7 (Grade group 2), involving approximately 60% of the biopsy





Hydrogel spacer

Discussion

- Prostate ca is the most common cancer in males
- About 5.3% of all cancer deaths in men
- 248,530 new cases are detected per year as per Cancer.gov/statfacts-USA statistics
- As per **SEER (Surveillance, Epidemiology, and End Results) database, 5 year survival rate in patients with all stages is 98%**,
- Many of the Urology centers leverages proton beam technology for most precise cancer treatment care

Discussion

- Depending upon the stage of prostate cancer, external beam radiation therapy or proton beam radiation therapy plays and important role in prostate cancer treatment
- Rectum is a critical organ at risk for radiotherapy and spacer placement is a limiting factor for dose escalated treatments
- Hydrogel spacers are an absorbable gel to maintain space between the prostate and rectum and to reduce the radiation dose to the rectum to prevent radiation proctitis
- Hydrogel spacer typically lasts during radiotherapy for 3 months, long enough for radiation treatments, and absorb in approximately 6 months

Discussion

- The risks of SpaceOAR Hydrogel insertion include pain, bleeding, infection, urinary retention, fecal urgency, and needle injury to the bladder, rectum or prostate.
- The SpaceOAR Hydrogel may be positioned incorrectly or may move after placement and cause displacement of prostate cancer tissue
- Prostate spacer migration has been reported into the anterior rectal mucosa , lateral placement eccentric to one side
- **Spontaneous healing of rectal penetration by SpaceOAR hydrogel insertion during spacer placement has been reported**
- Infection of hydrodel spacer and seminal vesicles is also reported

References

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