

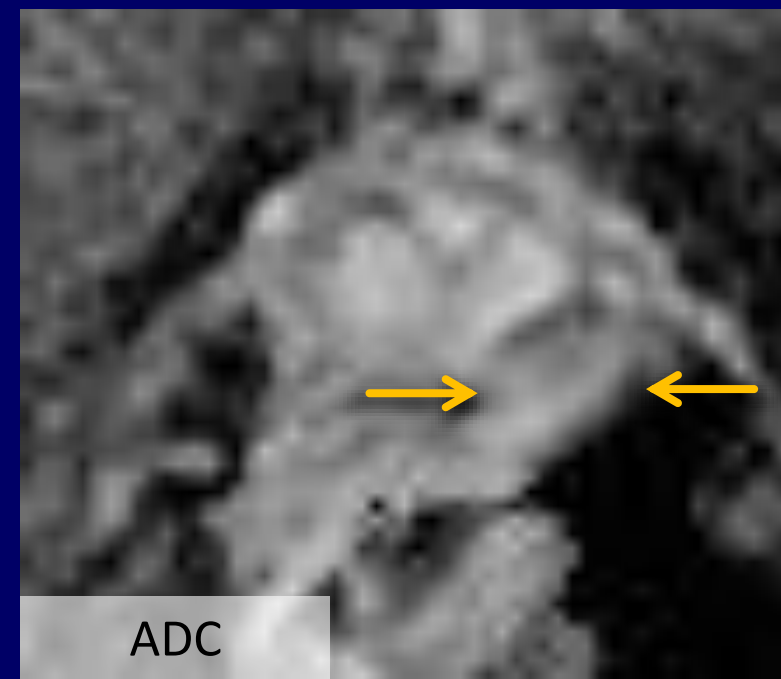
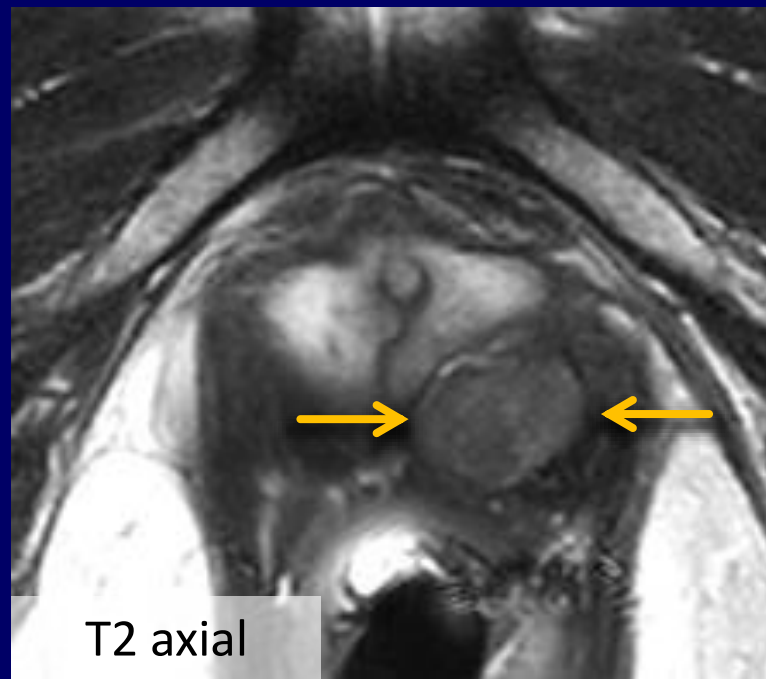
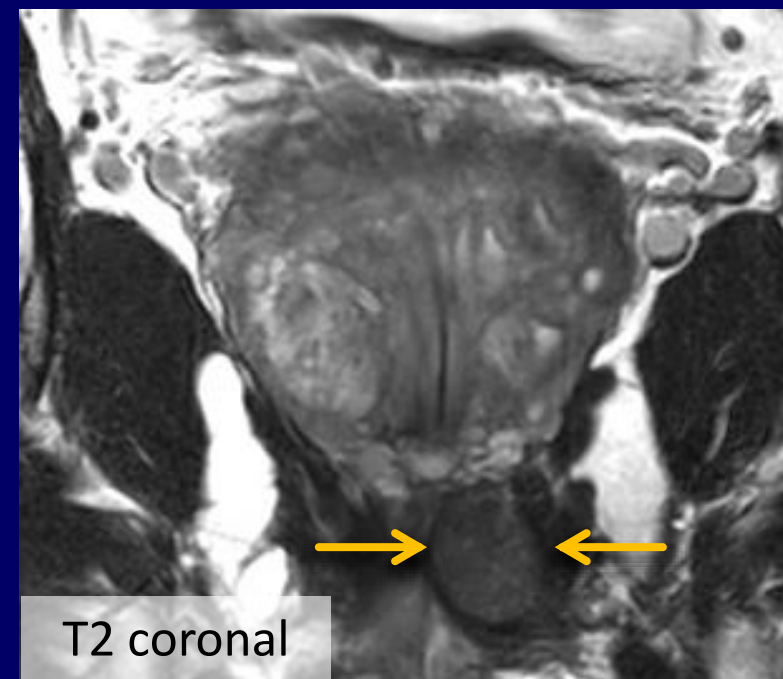
***Leiomyoma of the genitourinary diaphragm:
An unusual incidental finding at prostate MRI***

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Unusual incidental finding

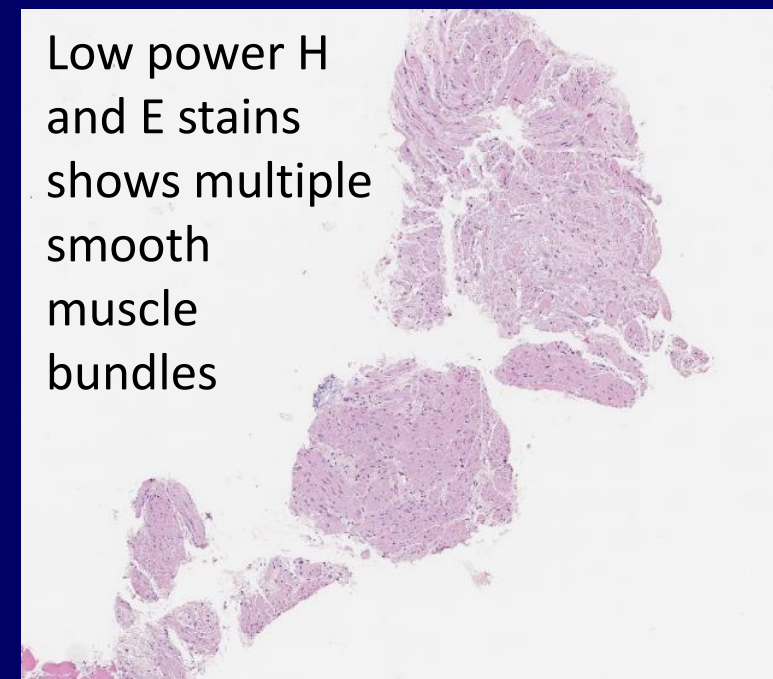
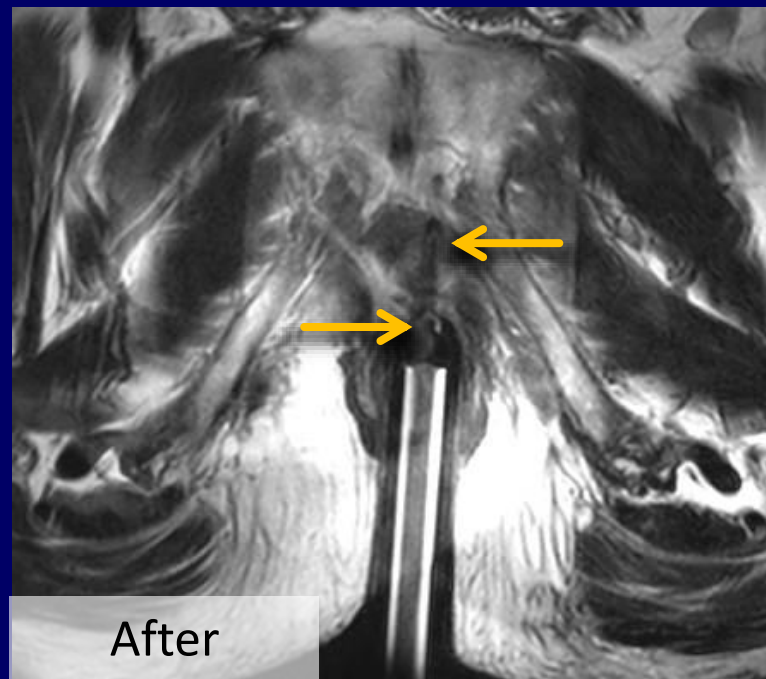
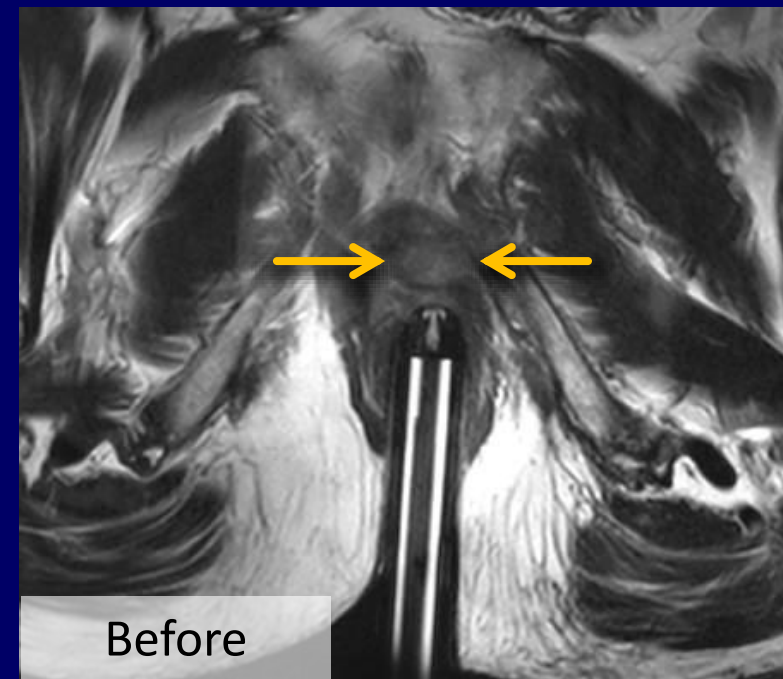
68 year old man with rising PSA to 13.6 while on active surveillance for Gleason 6 cancer. Repeat biopsy demonstrated Gleason 8 cancer. MRI requested.



MRI shows a well-circumscribed mildly heterogeneous 2.3 cm nodule (arrows) in the left genitourinary diaphragm, without significantly restricted diffusion. The initial impression was that this may represent an exophytic nodule of benign prostatic hyperplasia.

Unusual incidental finding

Because of the unusual finding and because malignant invasion of the GU diaphragm would preclude surgery, direct MRI-guided biopsy was requested.



Oblique axial T2 weighted MRI before needle deployment shows the introducer is pointing at the target nodule (between arrows on “before” image). After firing the biopsy device, the needle (arrows on “after” image) is seen to traverse the target.

Outcome

- ◆ Histopathological review demonstrated benign tissues only, including multiple smooth muscle bundles
- ◆ Combination of imaging and biopsy findings considered consistent with leiomyoma of the GU diaphragm
- ◆ Leiomyomas can occur at essentially any location with smooth muscle, including atypical locations in the pelvis

Koc O, Sengul N, Gurel S. Perineal leiomyoma mimicking complex Bartholin mass. International Urogynecology Journal and Pelvic Floor Dysfunction 2010; 21:495–497.

Tappouni RF, Sarwani NI, Tice JG, Chamarthi S. Imaging of unusual perineal masses. American Journal of Roentgenology 2011; 196: W412–W420.