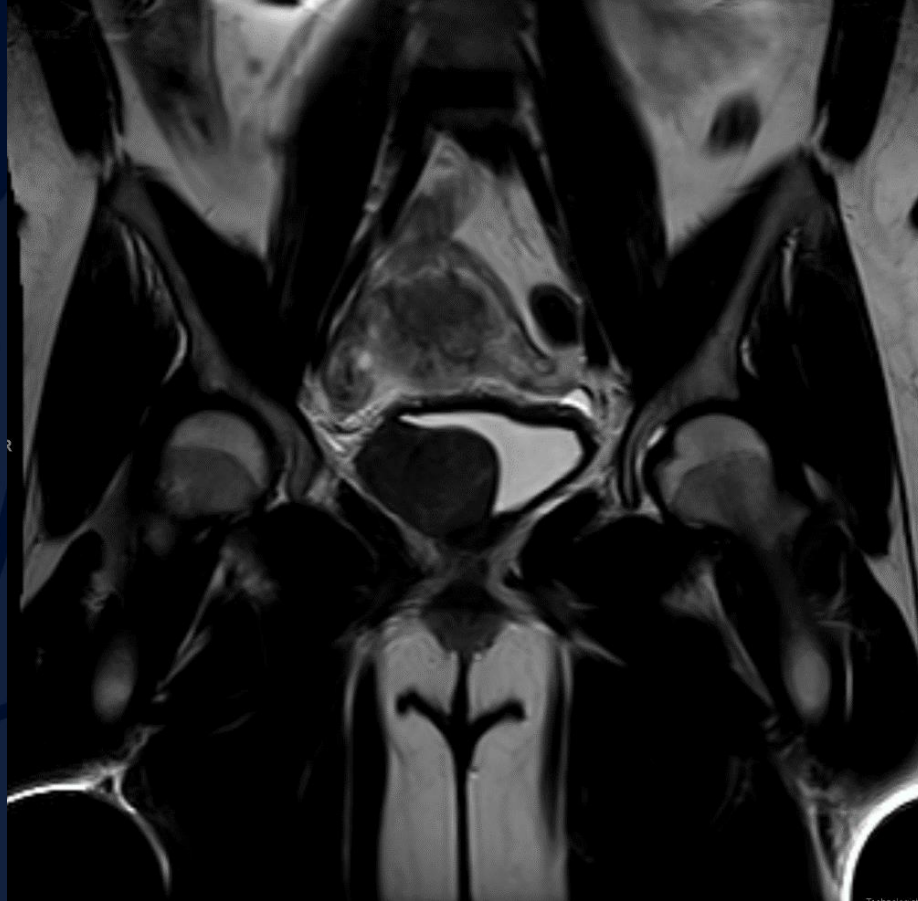
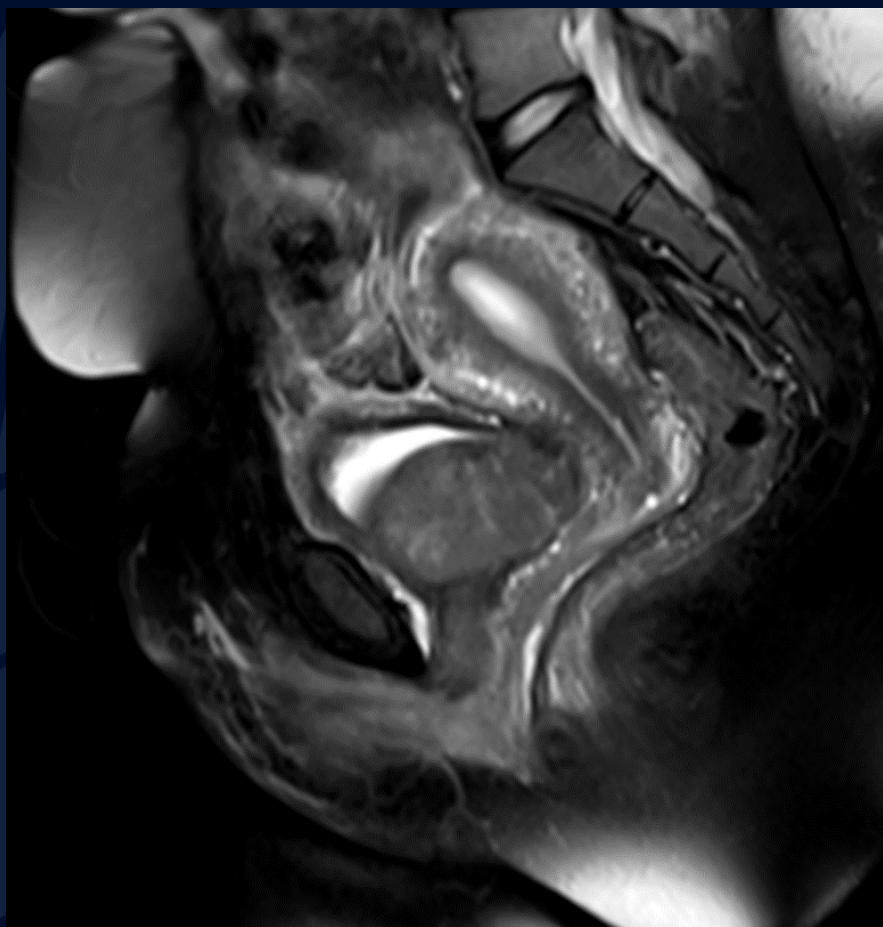


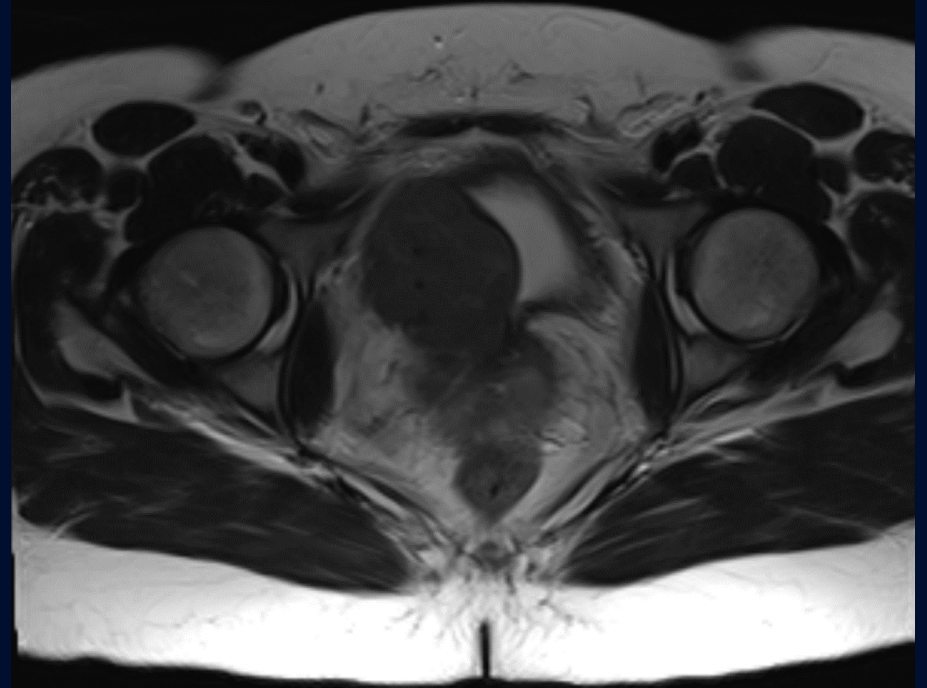
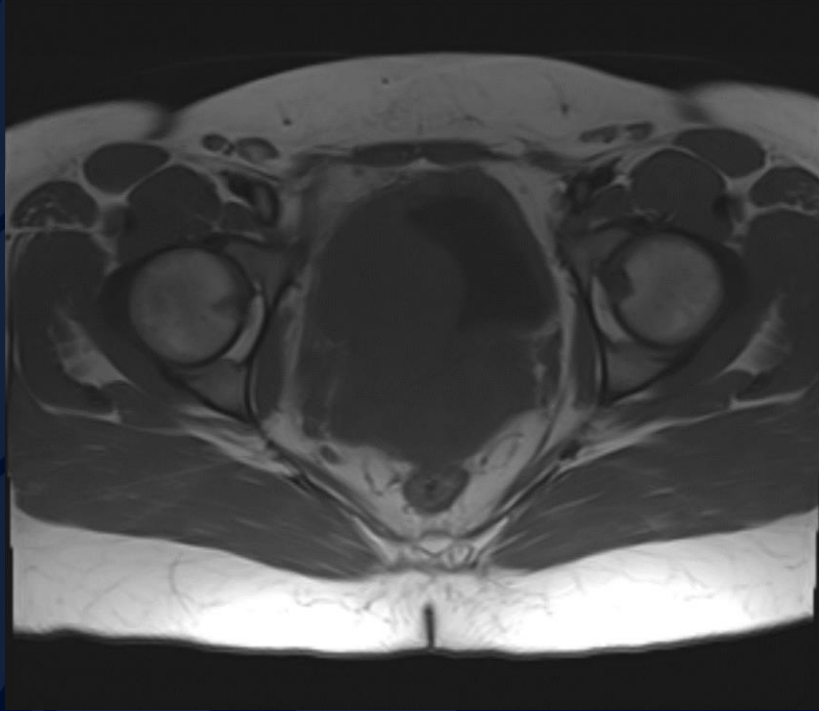
30 year old woman presents with urinary symptoms particularly increased frequency and urgency and low volume voids and some urge incontinence.

Elena G. Violari M.D.





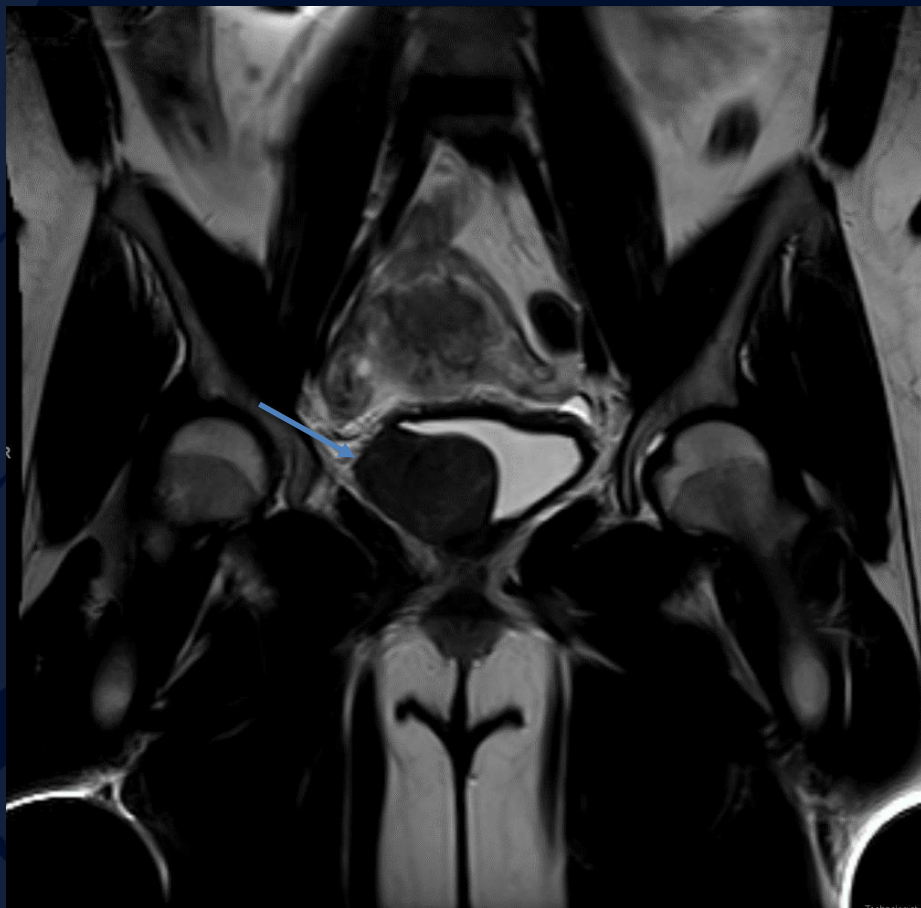






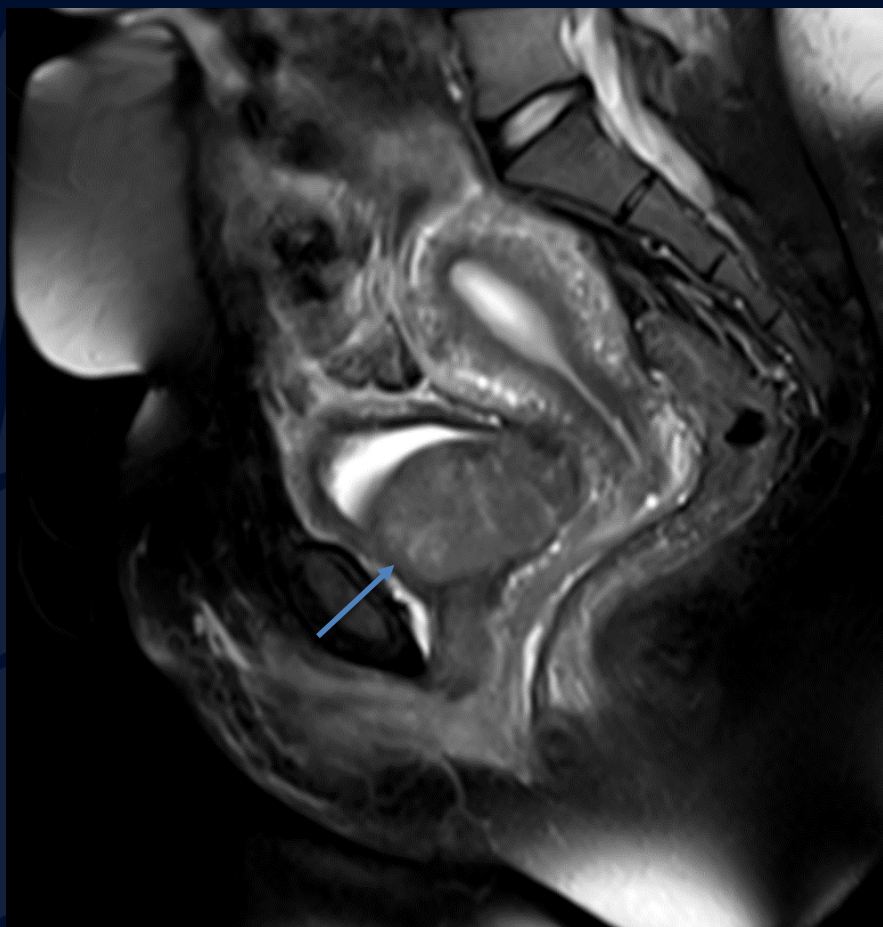
?

Bladder Leiomyoma

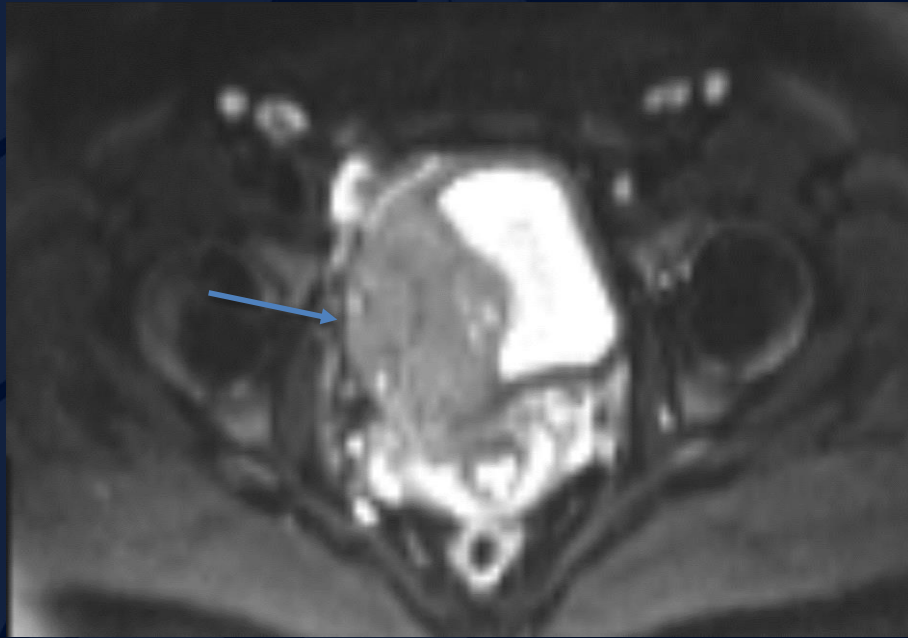


MRI Coronal T2W

Right hemi-pelvic lobulated T2 hypo-intense soft tissue mass measuring 3.9 x 5.6 x 7.2 cm. The mass arises from the urinary bladder wall.



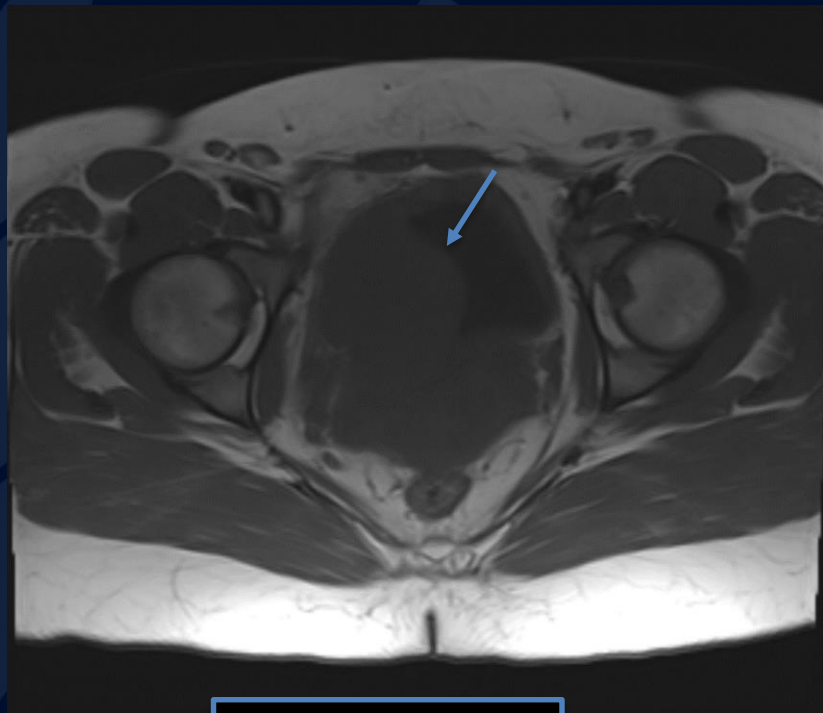
MRI Sagittal T2W



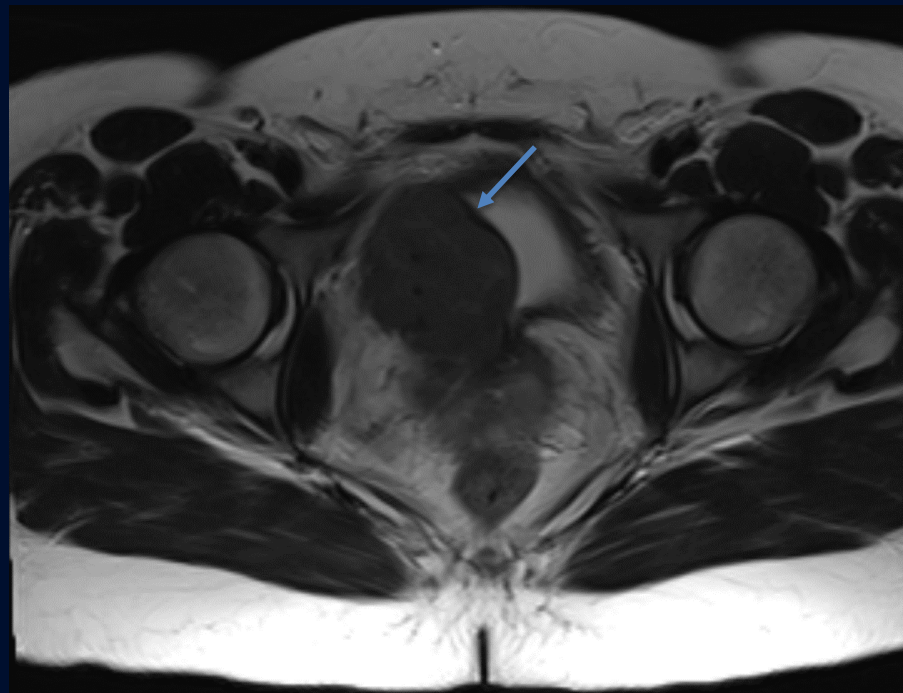
MRI DWI axial



MRI ADC axial



MRI axial T1W



MRI axial T2W

Bladder leiomyoma

Epidemiology:

- Rare benign tumor predominantly found in women.
- Most common benign urinary bladder neoplasm but accounts for only 0.4% of all bladder tumors.

Clinical presentation:

- Most are small and asymptomatic and are discovered incidentally. Large tumors manifest with symptoms as:
 - Hesitancy, frequency, dribbling
 - Hematuria
 - Pressure from mass effect
 - Urinary obstruction

Pathology:

- Non-infiltrative smooth muscle tumor with low mitotic activity, cellular atypia and necrosis. Leiomyoma arises in the submucosa. Growth may be submucosal (7%), intra-vesical (63%) or extra-vesical (30%).

Bladder Leiomyoma

Radiographic features:

- **Ultrasound:**

- Smooth-walled homogeneous hypoechoic solid mass in the bladder with thin echogenic surface.
- Determine endo-vesical, intramural, or extra-vesical nature of lesion.
- Reveal smooth-walled solid lesion with homogeneous echogenicity.

- **CT:**

- Accurate detection and localization of these lesions by presenting it as hypo-dense mass.
- Contrast-enhanced CT shows a moderately enhancing mass.

- **MRI:**

- T1: Intermediate signal density
- T2: Low signal density, Degenerated leiomyomas have more heterogeneous signal characteristics; cystic areas have high signal intensity.
- T1 C+ (Gd): Contrast enhancement is variable; degenerated areas lack enhancement.

References:

- **References**

1. Wong-you-cheong JJ, Woodward PJ, Manning MA et-al. From the Archives of the AFIP: neoplasms of the urinary bladder: radiologic-pathologic correlation. Radiographics. 26 (2): 553-80.
2. Sudhakar PJ, Malik N, Malik A. Leiomyoma of bladder. Saudi J Kidney Dis Transpl. 2008;19 (2): 232-5. 3. Yung-Wei Lin, Thomas I-Sheng Hwang.
3. Leiomyoma of Urinary Bladder: A Case Report and Literature Review. J Urol Roc Vol.12 No.2, June 2001