A Rare Case of Adenocarcinoma of the Membranous Urethra

Introduction and Objectives: Urethral cancer is an extremely rare lesion, with fewer than 2000 reported cases.

Materials and Methods: We present a rare condition with an even rarer sub type histologically and anatomically and review the current state of knowledge pertaining to this. **Results:** A 68 year-old man presenting with urgency and urgency incontinence for 6 months.

- DRE benign, PSA 0.66ng/ml.
- biopsy membranous lesion.
- Biopsy high grade (glandular and papillary)
- papillary urothelial adenocarcinoma (high Ki67, PSA stain negative, mitotic figures, negative PSA and PAP)
- CT thick walled bladder no perivesical involvement. MRI prostate nad, bladder thick walled, no nodes. Radical cystoprostatectomy and urethrectomy, 19 nodes removed all clear
- High grade urothelial adenocarcinoma of membranous urethra pT2N0 invading corpus spongiosum and prostatic apex.

Discussion: Most centers see only a few cases; there is not enough data to dictate the bestaccepted treatment. Tumors are often locally advanced at time of diagnosis, reflecting the generally poor prognosis. The histologic pattern of the urethral mucous membrane progresses from transitional epithelium to squamous epithelium as it continues distally. Larger studies suggest that urethral cancer is usually transitional cell carcinoma (55-77.6%), squamous cell carcinoma (11.9-21.5%), or adenocarcinoma from transitional metaplasia (5-16.4%) and other histology (5.5%). The penile, bulbar, and membranous portions of the urethra contain pseudostratified and stratified columnar epithelium, the prostatic urethra contains transitional-cell epithelium. Surgery remains the standard primary mode of treatment. Proximal cancer often is staged higher than distal, requiring aggressive treatment. Proximal urethral cancer is treated best with a multimodal treatment that consists of chemotherapy, radiation therapy, and surgical resection. However, the recurrence rate is higher than 50%. A study using the SEER database concluded that, set against TCC, advanced age, higher grade, higher stage, systemic metastases, other histology (non-SCC, nonadenocarcinoma), and no surgery versus radical resection were predictive of increased likelihood of death as well as death from disease. As compared with TCC, adenocarcinoma was associated with a lower likelihood of death and death from disease.

Conclusion: This is a rare histological subtype of urethral cancer in an unusual location.