

## Station 1

This photo shows suprapubic fullness for 70 y old male patient with a history of BPH, attending urology clinic complaining of inability to pass urine with episodes of urinary incontinence since more than 2 weeks.

- 1- What is his type of urine retention? and incontinence?
- 2- Mention 2 medical treatments and their site of action?
- 3- Give 2 indications for surgery in BPH?
- 4- Give 2 specific complications of TURP?



### Answers:

- 1- **Chronic urine retention, overflow incontinence.**
- 2- **- $\alpha$ 1-blockers (Tamsulosin) works on bladder neck and prostate= smooth muscle relaxation.**  
**-5 $\alpha$ -reductase inhibitors(Finasteride) works on epithelial component of prostate inhibits conversion of testosterone into DHT.**  
**-PDE-5 inhibitors(Tadalafil) smooth muscle relaxation.**
- 3- **Failure of medical treatment**  
**Recurrent UTI**  
**Recurrent gross hematuria**
- 4- **TUR syndrome, retrograde ejaculation**

## Station 2

Match the following:

- |   |                   |
|---|-------------------|
| A- Hematuria                                | 1- T3a            |
| B- Invasion of perivesical fat (microcytic) | 2- Liver          |
| C- Metastasis                               | 3- T4a            |
| D- Invasion of prostate                     | 4- painless gross |

### Answers:

- A  $\longrightarrow$  4  
B  $\longrightarrow$  1  
C  $\longrightarrow$  2  
D  $\longrightarrow$  3

## Station 3

Match (Renal cancer):

- |                        |                                |
|------------------------|--------------------------------|
| A- VHL syndrome        | 1- Proximal convoluted tubules |
| B- MC presentation     | 2- Seen in pregnancy           |
| C- Wunderlich syndrome | 3- Incidental                  |
| D- Origin              | 4- Autosomal dominant          |

### Answers:

- A  $\longrightarrow$  4  
B  $\longrightarrow$  3  
C  $\longrightarrow$  2  
D  $\longrightarrow$  1

## Station 4

48 yo male, diabetic patient complains of recurrent UTI ~ 3 episodes in 6 months.

The urine cultures showed proteus and the same antibiotic resistance each time.

- 1- What is the most likely cause of his recurrent UTI?
- 2- Mention the other mechanism for recurrent UTI other than what he has?
- 3- What factors make his UTI a complicated case?

Answers:

- 1- **Urease producing bacteria: Proteus / Struvite stone**
- 2- **Reinfection ( he has persistent recurrent UTI )**
- 3- **Male, diabetic.**



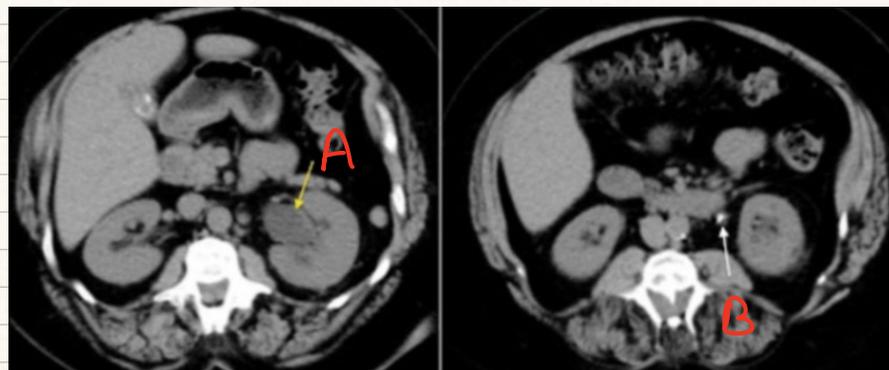
## Station 5

Male patient complaining of left loin pain, fevers, chills presented to the ER. Non-contrast CT pictures show:

- 1- What is A, B?
- 2- What is your diagnosis?
- 3- Management?

Answers:

- 1- **A)Hydronephrosis ( or renal pelvis dilatation)**  
**B)Ureter stone**
- 2- **Obstructive pyelonephritis**
- 3- **Admission, IV analgesia, antibiotics and Double J stent**



## Station 6

34 yo woman with 5 children came to urology clinic, complaining of passage urine when she coughs

- 1- Most likely her type of incontinence is?
- 2- Pathophysiology of this condition:
- 3- Mention other types of urine incontinence.

Answers:

- 1- **Stress incontinence**
- 2- **Urethral hypermobility secondary to multiparity (i.e., damage of the pelvic floor muscle levator ani and/or the S2–S4 nerve roots) \*\*Increase in intraabdominal pressure (e.g., from laughing, sneezing, coughing, exercising) → ↑ pressure within the bladder → bladder pressure > urethral sphincter resistance to urinary flow**
- 3- **overflow, urge, mixed, functional, true.**

## Station 7

Patient presented to your clinic complaining of infertility issue. Semen analysis shows azoospermia.

- 1- Next step to differentiate between obstructive and non-obstructive azoospermia?
- 2- What is the role of Leydig cells?
- 3- Give 3 causes of primary nocturnal enuresis?

Answers:

- 1- **Testicular biopsy?? (or hormonal profile first then biopsy :/)**
- 2- **Testosterone production**
- 3- **Familial, delayed bladder maturation, altered ADH secretion, psychological**

## Station 8

- 1- Pediatric patient with recurrent febrile UTIs, Spot diagnosis?
- 2- Female baby with bilateral hydronephrosis, Spot diagnosis?
- 3- Give 3 DDX for empty right scrotum.  
**Retractile, incomplete undescended testis, ectopic, absent.**  
**Post-orchietomy**



**Vesicoureteral reflux**



**Posterior urethral valves**