# TEST BANK

Doctor 2019

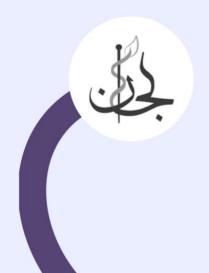
# **SUBJECT:**

OPTHALMOLOGY & UROLOGY 018 MINIOSCES Collection

# **COLLECTED BY:**

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# UROLOGY OSCES 018

# عدد النجوم يتناسب طردياً مع عدد مرات تكرار الموضوع وأهميته \*\*\*\*\*\*\*\*\*\*\* BLADDER CA: \*\*\*\*

- Risk factors for Bladder CA
- How to diagnose it? "Investigations"
- Why do we do cystoscopy?
- Why do we use CT with contrast?
- Management in muscle invasive bladder cancer
- risk factors for bladder Ca.. Take a full history form patient presents to your clinic with hematuria.
- treatment of invasive bladder cancer is (Radical cystectomy in general) but in detail you should say:
  - -For males: pelvic lymphadenenctomy with cystoprostatectomy
  - For females: Ant pelvic exenteration
- What are the surgeries used for muscle-invasive bladder CA?
- what is the most important factor for management
- what is the surgery used for renal urotherial carcinoma?
- How to follow up patient with Bladder cancer-Ta
- Modalities of treatment lal muscle invasive
- how treat it? (TURBT) / the roles of this surgery
- Risk factor for Bladder SCC
- Approach to bladder CA
- risk factors of bladder cancer; most imp one is smoking
- What is the radiological Way to dx bladder ca?

#### IMPOTENCE: \*\*\*\*\*

- Patient complains of impotence, take detailed hx, pe, invesx, tx. how to differentiate psychogenic vs organic eractile dysfunction from history?
- History
- Types (organic + psychotic) give 3 differences
- Physical
- Investigations
- Management
- 4 differences between psychogenic and organic impotance by history (1- morning Erection / 2- onset
  acute in psychogenic, while gradual in organic / 3- if patient is old age with multiple comorbidities its
  likely organic, while if he's psychiatric patient it's likely psychological 4- if he has multiple wives ask if
  it happens with one wife or all of them
- Causes of Impotence
- MOA of sildenafil and possible side effect
- Asked about Azoospermia classification
- Physiology of erection

#### VARICOCELE: \*\*\*\*

- definition
- Indication for surgery
- What is the surgery

- treatment approach
- Full physical exam from head to toe, look for signs of hypogonadism (gynecomastia, testicular atrophy), signs of hypothyroidism, external genitalia (atrophy, palpable vas deferens, varicocele, lumps)

# HYDROCELE: \*\*\*\*

- Definition
- Types of hydroele in children
- What is the management
- types of hydrocelectomy

#### RENAL TRAUMA / GUS TRAUMA \*\*\*\*\*\*

- Indication for imaging in Renal TRAUMA patient
- What is the best image
- grades of kidney injury
- Diagnostic tool for kidney injury
- Patient presented to the ER with renal trauma after RTA →Hx ,PE & investigations & surgery
- Patient came to ER after RTA what are the Signs and symptoms that make you suspect renal trauma in this patient? \*\*Gross hematuria, pain and tenderness at lower chest flanks abdomen,, bruises, nausea and vomiting and abd distention to due hematoma
  - 1. image of choice: triphasic CT with contrast (delayed execratory phase is so important to see if there is extravasation)
  - 2. other injuries? Rib fracture ..viscera: liver and spleen
  - 3. Management: ABCDE and vitals then if hes stable then it depends on the grade:
  - 4. 1/2/3 and stable :conservative : bed rest . Iv fluid . Antibiotics prophylaxis . Follow up with vitals and labs , angioembolization if needed
  - 5. If 4/5 and stable: also conservative, ICU admission, follow up with vitals and labs, IV fluids, prophylactic antibiotics, angioembolization if needed
  - 6. If unstable: surgery: renal reconstruction or nephrectomy

# SCROTAL PAIN: \*\*\*

SENARIO → A pt with acute left scrotal pain came to er

- DdxHx
- investigation (and why
- final Dx

SENARIO  $\rightarrow$  You are the person on call in an Emergency department, A 33 year old male came with scrotal swelling?

DDx?

# FLANK PAIN: \*\*\*\*

SENARIO → Patient presented to ER with flank pain

- Take full history
- PP: Age , job , gender (in my case male)

-HPI: SOCRATES

- Physical exam
  - √ vital signs
  - √ Abdominal exam
  - ✓ Scrotal exam if the pain radiating to genitalia
- Investigations:
  - Labs: (CBC,KFT,U/A,UCx)
  - Images:
    - $\checkmark$  Non-contrast CT scan ⇒(If stones)
    - √ US (If hydronephrosis)
    - ✓ K.U.B
- If the patient has upper uretric stone (size 10 mm) what to do? Rigid uretroscopy with laser lithotripsy
- What to do in Acute management: decompression (uretral stent or nephrostomy)

SENARIO → Young man came to the ER with left flank pain.

- What's your top differential and what to do?
- What is the most common cause of this pain?

# HEMATURIA: \*\*\*\*\*

- What is hematuria
- Differential diagnosis of hematuria
- Causes of hematuria
- How 2 confirm that a 6yr old kid with gross hematuria has bladder CA
- Definition of hematuria /incontenance : Definition and its types
- Diagnostic approach
- If a patient comes with grosss hematuria he's 50, investigations you would ask for him
- Dxx of red urine and how to differentiate between urological and nephro hematuria

# UTI: \*\*\*\*\*\*

- Definition
- Types of UTI & define them
- What is the pediatric classification of UTI
- Recurrent UTI definition ( how many +ve cultures within 1yr vs how many symptomatic episodes within 1 yr)
- Persistant UTI vs Recurrent definitions
- Patient comes with uti and urge incontinence, what is your management? (antibiotics, if no improvement look for other causes)

- UTI presentation
- what do you call the presence of pus in the kidney? How do you treat it?
- what do you do if a complicated -pyelonephritis with kidney stone came to ER--urgent Double J or Nephrostomy
- asked me what is a feared complication of complicated pyelonephritis with a kidney stone--pyonephrosis
- how do you treat pyonephrosis---percutaneous nephrostomy
- What is the presentation of the following infections (osce station consist of the following questions)
  - ✓ Cystitis
  - ✓ Acute pyelonephritis
  - ✓ What is the management of acute pyelonephritis?
  - ✓ What is the case that you consider acute pyelonephritis as an emergency? when there is obstruction
  - ✓ How you treat both of them?
- Emphysematous pyelonephritis... its definition and which patients usually get it (pts with Dm) and tx
- Xanthogranulomatous pyelonephritis...
  - ✓ definition
  - ✓ how it appears on ct scan (what's the sign's name... bear's paw sign)
- Clue about uti/sepsis, a patient with fever must have immediate intervention (double J, nephrostomy)
  - √ what about investigationss?

# INCONTENANCE: \*\*\*\*

- Types
- Definition of each type
- Definitions of incontinence, stress incontenence
- Methods of treatment
- Types of surgeries in stress inconsistency
- Names of receptors
- Urge incontinence and what is the most common cause ( uti ) other causes like overactive bladder
- Overflow incontinence ( definition )
- Surgical options for treatment of stress incontinence?
- What is functional incontinence?
- What are the medical treatment options of urgency urinary incontinence?
- What are the surgical treatment options for stress urinary incontinence?
- What is the definition of nocturia, frequency, urgency, incontinence, hesistancy, and infertility?

#### أكيد BLADDER CA بس مش قد ال BLADDER CA

- Indication of BPH surgery
- Types of surgeries of BPH
- Differences between radical and open prostatectomy
- Medication for BPH and their side effects
- BPH symptoms
- Treatment
- medical treatment

- surgical procedures
- Obstructive symptoms
- mechanism Of action for BPH drugs
- Side effects for 5alpha reductase imhibitors?
- risk factors
- PSA analysis with interpretation / patient with 8ng/ml history, physical exam, investigation for such
  complaint (mention risk factors that differentiate prostate cancer from BPH, dont forget to mention to
  repeat the PSA if it was don't inside JUH), best imaging modality for prostate cancer (multi
  parametric MRI), best treatment method for localized prostate cancer is active surveillance and radical
  prostatectomy.
- why the patient has post void dribbling in bph
- · what are the management of mild symptoms of BPH
- Indications for surgeries in BPH
- Types of surgeries
- Indications for subtotal/open prostatectomy
- Types of TURP
- What is hesitancy
- Approch to BPH patient
- Normal PSA?
- What are the surgical options for treatment of BPH after failure of TURP
- What are the indications for open prostatectomy
- what are the indications of surgery in BOO?

# INFERTILITY & ERECTILE DYSFUNCTION: \*\*\*\*

- take history
- definition
- etiology
- examples of non-obstructive infertility
- investigations
- instructions for collecting semen
- How to distinguish between obstructive & non-obstructive causes ?! FSH
- Causes of erectile dysfunction (vascular, endocriopathy, neurogenic, psychogenic.... Etc)
- Physiology of Erection
- (focus on mentioning all the causes as pre-testicular causes, testicular causes, and post testicular causes)
- Difference btw. Primary and secondary male infertility?
- the most commonly done investigation: SFA and asked about some parameters.
- mention the Sperm Retrieval techniques.
- patient with erectile dysfunction (take history, physical examination, investigation, treatment 1st line, 2nd line, 3rd line, compare between psychogenic and organic cause of erectile dysfunction, physiology of erection
- He asked me about Erectile dysfunction (neurophysiology, causes two scenarios one is psychological and the other is diabetic.
- Erectile dysfunction lines of treatment

- Define azospermia and how to test for it
- Causes of azospermia and how to test for them
- First we need to take a thorough history (then he asked me what should we ask for in the history)- any previous children, frequency of intercourse and its relation to the menstrual cycle, erectile dysfunction, signs for systemic diseases (thyroid), scrotal pain, family history of genetic disease, cryptorchidism.
- What investigations? Seminal analysis, hormonal workup
- Parameters of seminal analysis and its cut-offs?
  - √ Volume- 15 ml.
  - √ Total count-39 million
  - ✓ Density of sperm- 15 million/mL
  - ✓ Motility- 40% (32% progressive)
  - ✓ Morphology 4% normal

# STONES :\*\*\*\*\*

- Types of stones.
- Treatment of renal stones
- Indications of admission in patients with ureteric stones
- Renal pelvic stone what are the options for treatment (4 options): flexible uretroscopy with laser
   lithotripsy / ESWL/PCNL/open surgery
- what are the 3 theories behind the stone formation?
- One of them is unknown the others Idk
   (But its not urine stasis or crystallization or from obstruction)
- -the presentation of a kidney stone pt?
   (Sudden flank pain , dysuria, hematuria , LUTS , nausea and vomiting maybe asymptomatic , renal failure if late )
- what are the investigation you would do?

Non contrast CT, KUB, US, MRI

- Why we order US?
- For pregnant and pediatric pt
  - √ what do you see on US?
  - √ How to manage a ureter stone (he didn't specify the size)?
  - ✓ First Medically alpha blocker, increase fluid intake and analogsia
  - ✓ Or uretroscopy + lithotripsy (laser or pneumatic) or ESWL Or by open surgery if it was large
- Indication of hospitalization in pt with renal stones

#### RENAL TUMOR: \*\*\*\*

- risk factors of renal cell carcinoma
- How to diagnose RCC and Renal stone
- What is enhancement
- Diagnostic imaging study of choice for renal tumors?
- is the treatment of choice for renal tumors?
- Risk factors for RCC
- what is the gold standard imaging for diagnosis
- what is the most common presentation

- what are the treatment options
- why would you choose ct with contrast
- how could you tell on CT that this is RCC
- how would you differentiate between angiomyolipoma and RCC
- what is the management of RCC with metz
- Treatment of advanced( metastatic) RCC

### TESTICULAR CA & BENIGN SCROTAL CONDITIONS:

- Benign scrotal conditions
- Differentiation between benign mass and malignant mass
- Testicular ca history , physical , investigations ....etc
- Spermatocele --> dead semen
- Epididymoorchitis vs torsion (VERRRRRRRRRRRRRRRRY IMPORRRRRRRTANT انکرر کثیر))
- testicular torsion types, presentation, pathophysiology, management
- Unusual Feeling in the testis \_\_> tumor specific
- Markers → AFP,B-HCG and LDH
- If both AFP AND BHCG are high=mixed
- Tumor = orchiectomy no biopsy
- Testicular cancer definitive treatment surgery + approach
- Testicular lymph drainage (retroperotoneal In)
- 2 examples of 5 alpha reductase inhibitors
- Testicular cancer: presentation, treatment, classification (generally)
- Case of acute scrotum
  - differential diagnosis and causes
  - differences between epididymo-orchitis and tortion in history and physical
  - -what imaging modality you use to diagnose and differentiate between them
  - -treatment of each one
  - if malignancy is a cause, how doescit cause pain: necrosis and hemorrhage

# PROSTATIC CA:

- and everything related to PSA and prostate cancer
- international prostate symptom score? The ranges of the score
- Defention of urinary retention, difference between acute and chronic urinary retention, T stages for bladder cancer , prostate ca staging scale, prostate ca patient with mets what will you do for him
- Open prostatectomy and its types
- what you know about prostate cancer
- Prostate cancer presentation diagnosis management
- What is the PSA: glycoprotein produced by normal & malignant prostate tissue... Liquefies the semen & dissolve the cervical mucus
  - o normal PSA: < 4 ng/ml
- But it depends!!
  - o sensitive or specific? Sensitive not specific (can be false negative or F positive .. give ex)
  - $\circ$  to be more accurate : PSA can be related to ? Age , volume , kinetics, free/ total < 20% to suggest a cancer !

- first presentation? Asymptomatic! (More common in peripheral zones -- obstruction appears late)
- TX ?
- For intermediate risk / life expectancy > 10 yrs / localized tumer/ no metz  $\rightarrow$  Radical prostatectomy +/-radiotherapy
- & I added example of cryosurgery & focal therapy... they can be used as well
- Prostate cancer: approach (Hx, PEx (DRE), investogations) management, grading.
- PSA normal value.
- tell me about \*prostate ca\*\*
  - 1-2nd mc cancer in men
  - 2-mc type (adeno carcinoma)
  - 3-risk factors (family history, black race, & age)
  - 4- tell me about psa (what it is and parameters including velocity, ratio, & density)
  - 5- what would you do for a pt with high psa (multi-parametric mri and dre)
  - 6-scoring system name (gleason score)
  - 7- what imaging is used to take biopsy (trus)
  - 8-definition of incontinence (involuntary loss of urine)

#### PROSTITIS:

- prostatitis and its types...
- How do patients appear with acute prostatitis?
- And what's the management when causing retention? Suprapubic catheter NOT foley
- Acute prostatitis
- Acute and chronic prostatitis definitions and differences

# NEUROGENIC BLADDER & URINARY RETENTION:

- definition
- at what level the lesion might be when the patient has dyssynergia? (Above T6
- patient came to ER with complete cut of the spinal cord, when we will see the manifestation (he wants timing)? (Around 5-6 weeks)
- SENARIO → 70-year old pt came to the ER with inability to void for 8 hours.
  - ✓ What is the term describing this? Urinary retention
  - ✓ Can it be both painful and painless?
  - ✓ What are some causes of it?

# VUR:

- WHAT Is the most common symptom of VUR? Recurrent UTI.
- grades of VUR?
- Definition?
- Is it normal?
- Anti-reflux mechanism?
- Modalities for diagnosis?
- VCUG with CT or X-ray
- But in peds Radionucleotide cystogram is superior to conventional VCUG with less harmful effects

- Management:
  - 1-Observational management in details
  - 2-Surgical management and its indications
  - 3-Procedures like injection of bulking agents

# URODYNAMIC STUDY:

- Urodynamic phase explains
- The difference between screening and early detection in prostate cancer
- The first screeing age
- The second screeing age
- (NGB and UDS)

He then asked me to explain how the UDS was done (you need to clarify it's three phases: pre-test, filling, voiding). I also had to explain what intra-vesical, intra-abdominal and detrusor pressures are (like how they relate to each other in the equation and how they're measured)

# ANATOMY, EMBRYOLOGY & PHYSIOLOGY

- embryology of testes + embryology of female genital system (in details)
- embryology of kidney (in details)
- + which part was the primitive kidney?
- At which level are kidneys found?
- What is the purpose of having kidneys at this level but not in the pelvis for example?
- Question about ectopic kidney....
- layers of detrusor muscle?
- Question about urethra histology...
- Nerve supply of ureters and testes...
- What is the name of the mechanism that is responsible for expulsion of urine into bladder from the ureter?
- What is the blood supply of ureter?
- What is the type of epithelium that is found in proximal convoluted tubules?
- Describe anatomy and physiology of erection.

# UNDESENDED TESTIS:

- ✓ prevelance in preterm term and after one year (30%,3%,1%)
- ✓ Managment..
- √ Managment if testis is not palpable
- ✓ Operation if testis can not be descended to scrotum in one operation..(two stage fowler-stephens orchidopexy)

#### FREE QUESTIONS:

- CT imaging (units, degree of enhancement, w/ or w/o contrast) (((((use the correct full terms for procedures and definitions.))))
- What is the physiology of urine
- What is the difference between testicular torsion and epidydimoorchitis \*\*\*\*
- indication of partial nephrectomy
- Complications of using glycine: TUR syndrome (not with NS)
- TUR syndrome on vitals : Hypertension + Bradycardia
- Difference between mono polar and bipolar TURP (Glycine vs Normal Saline)
- Indications for Double J insertion
- what's PSA? What's the normal level? What does an increase in its level indicate?
- What is BCG
- What's TURP syndrome? How do we treat the hyponatremia?
- How to diagnose hyponatremia in physical examination.
- Drugs and occupations associated with hematuria
- what are the lower urinary symptoms
- Bosniak classification
- What are the indications for intervention with a double J?
- define hydronephrosis
- define hydrouretronephrosis
- maneuvers of kidney examination
- how to differentiate between left kidney mass and splenic mass on examination?
- Why fever is important and what's the difference in management between a patient with or without fever?
- Hypospedis: definition, location of urethral opening, what is it called if opening is on dorsal side?
- What is IPSS? What does it stand for? How many categories are included? What symptoms are asked about? It's out of what
- Urology exam.pdf Google Drive

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