Obstructive jaundice

Clinical features: Fever, enlarged tender palpable liver

Investigations:

- CBC: Leucocytosis, Hb% - decrease,
- LFT: Bilirubin → increase, SGOT, SGPT, ALP → increase
- Blood urea, S. creatinine → increase,
- Blood glucose → increase
- PT, INR → increase
- USG-extra and intra hepatic duct: dilated

Q1. What is your diagnosis?

Ans- Obstructive jaundice with features of cholangitis

Q2. How you will treat this patient?

Ans-

- Correction of fluid & electrolyte imbalance
- Correction of coagulopathy by Vit-k, FFP
- Prophylactic antibiotic
- Decompression of CBD
- Same patient scenario some altered but not normal

Q3. What could the possible causes?

Ans- Carcinoma head of pancreas, periampullary carcinoma, cholangiocarcinoma, choledochal cyst

Q4. Give 4 investigations to evaluate this patient?

Ans-

- ERCP
- MRCP
- CT scan
- PTC
- Endoscopic biopsy

You have decided to do ureterolithotomy on Rt. side for a stone at about mid-ureter by open surgical method.

1. By which type of incision you will approach — muscle cutting or muscle splitting?
2. What pre-operative radiological investigation you with do on the day of operation & why?
3. What step is essential before you open the ureter to remove the stone?
4. How you will open the ureter?
5. What important step you are to perform before closing the ureter?
6. What type of stitches you will give for repair of the ureter?
7. During isolation and dissection of ureter what injuries you may cause if you are not meticulous.

Ureterolithotomy done for stone in mid ureter by open method.

1. What is the incision, where?
   - Muscle cutting iliac incision

2. What preoperative investigation you will do in morning why?
   - X-ray KUB to see the position of stone.

3. What essential step you have to do before stone removal?
   - Fixation of ureter before opening if by sling above the stone
   - Two stay sutures in ureter at the level of stone
   - Fixation of stone between thumb and index figure

4. How will you open the ureter
   - By longitudinal incision

5. What step you will take before closure?
   - Wash up and down by ureteric catheter
   - Chick the distal patency

- Closure leaving D-J stent which is to be removed 4 wks later.

6. What stitch to close the ureter?
   - Extra mucosal interrupted

7. During isolation of ureter what injury can happen?
   - Gonadal vessels - laterally artery medially vein
   - Lumber vein
   - IVC
   - Genitofemoral nerve
   - Peritoneum

DATA INTERPRETATION

Mrs. X is suffering from jaundice for 1 week.
Her LFT profile is as follows

(a) Serum bilirubin - 10.50 mg%
(b) SGPT - 60 units/L
(c) Serum alkaline phosphatase - 500 units/L

1. What is the clinical type of jaundice?
   Ans._____

2. Name one biochemical test that is required before any intervention.
   Ans._____

3. Name the imaging that you will ask for first and name three expected findings?
   Ans. A) _____
   B) i)_____
   ii)_____
   iii)_____

4, Name four advanced imaging done to identify the cause of jaundice?
   Ans. i)_ _____
   ii) _____
   iii)__ _____
   iv)_ _____

Check list

1. What is the clinical type of jaundice? 1.0
   Ans. Obstructive Jaundice

2. Name one biochemical test that is required before any intervention. 1.0
   Ans. Prothrombine time

3. Write the first imaging you will ask for and name three expected findings?
   → A USG hepatobiliary system and pancreas 1.0
   i) Enlarged liver, Distended/ contracted GB with or without stones 1.0
   ii) Dialated biliary tree with or without stones. 1.0
   iii) Mass pancreatic head. 1.0

4. Name four advanced imaging done to identify the cause of jaundice? 4
   Ans. i) ERCP 1
   ii) PTC 1
   iii) CT HBS and pancreas 1
   iv) MRCP 1

Here is the LFT profile of a jaundiced patient –

- **Serum bilirubin 10.5 mg%**
- **SGPT 60 units/L**
- **S. ALP 500 units/L**

1. What is the clinical type of jaundice?
   - Obstructive jaundice.

2. What other laboratory investigation you will perform in this case?
   - CBC
   - Stool OBT
   - Urobilinogen in urine increased starcobilinogen in stool → Decreased
   - PT
   - INR
   - S. Creatinine
   - S. Electrolytes

3. What is the first imaging you will ask for & what are you expected findings?

- USG of HBS and pancreas
- Expected finding
- Enlarged liver
- Distended/contracted gall bladder with or without stones
- Dilated biliary tree with or without stones
- Mass in head of pancreas

4. What advanced imaging can be done to confirm the diagnosis?
    - ERCP, MRCP
    - PTC
    - CT scan of HBS and pancreas
    - Endo USG biopsy

5. In suspected case of malignancy how can the tissue dx be achieved?
    - Endoscopic biopsy from the ampula or periampulary region.
    - USG / CT guided biopsy

OTHERS

Salivary Glands/oral cavity

Q. Give name of five parotid gland tumor.
- Pleomoophic adenoma
- Warthims tumour
- Muco-epidemoid carcinoma
- Sq. Cell Carcinoma
- NHL.

Q. Give the Rx protocol of oropharyngeal carcinoma
- Resection
- Radiotherapy
- Reconstruction
- Chemotherapy.

Q. Give three premalignant condition of oral mucosa.
- Leucoplakia
- Erythroplakia

- Chronic hyperplastic candidiasis.
- Oral submucous fibrosis, sideropanic dysphasia

Q. Common presentation of oral carcinoma

- Indurated ulcer that bleeds on the floor of the mouth
- Slurring of speech when tongue involved.
- Tooth, extraction socket that fail to heal.
- Gingival inflammation with dentures no longer filling.

Q. Dx of intra oral Carcinoma.

- High index of clinical suspicion for all intra oral lesion
- Incisional biopsy under L/A
- FNAC of the LN in Neck of any
- MRI for better delineation of soft tissue.

Q. Cardinal feature of oral carcinoma

- The presence of red or write patch
- A granular appearance of an ulcer with fissuring or raised exophytic margin.
- Unexplained tooth mobility
- Induration beneath any lesion
- Fixation of any lesion to underlying tissue or overlying skin
- Presence of abnormal blood vessels supplying a lump.
- Cervical lymphadenopathy.

Other Salivary gland

Q. Give important relationship of submandibular gland.

- Lingual nerve
- Hypoglossal nerve
- Anterior facial vein running over the gland with the fascia.
- Facial artery within the capsule of the gland
- Marginal mandibular branch of facial nerve.

Q. Type of sialadenits and its cause.

Type:

- Acutc
- Chronic

- A cute on chronic

Causes:

- Viral-mumps
- Bacterial-secondary to obstruction
- Trauma.

Q. Give indication for submandibular gland excision.

- Sialadenits
- Stone proximal to lingual nerve
- Salivary tumors.

Q. What are nerves risk in removal of submandibular gland.

- The marginal mandibular branch of facial nerve.
- The lingual nerve
- The hypoglossal nerve.

Q. Give fire complications of submandibular gland excision.

- Haematoma
- Wound infection
- Marginal mandibular nerve injury
- Lingual nerve injury
- Hypoglossal nerve injury.
- Transection of nerve to mylohyoid muscle producing submertal skin anaesthesia.

Q. Give the investigation for histological Dx.

- FNAC
- Open surgical biopsy is contraindicated.

Q. Give important structures sun through the parotid gland.

- Branches of the facial nerve
- Terminal branch of the external carotid artery
- Retromandibular vein.
- Intraparotid lymph node.

Q. Give the common causes of parotid swelling.

- Mumps
- Acute ascending bacterial sialoadenitis.
- Acute bacterial parotitis
- Obstructive parotitis causing swelling mealtime.

Prostate

Q. What is the specimen?
- Prostate

Q. Give the consequence of BPM.
- No symptoms, no bladder outflow obstruction
- No symptoms of but urodynamic evidence of BOO
- LUTS lower urinary tract symptoms no evidence of BOO
- LUTS & BOO
- Others retention of urine, haematuria, UTI, stone formation

Q. Give four conditions which can coexist with BOO.
- Idiopathic detrusor over activity
- Neuropathic bladder dysfunction
- Degeneration of bladder smooth muscle
- BPH.

Q. Give five causes of BOO.
- BPH
- Bladder neck stenosis
- Bladder neck hypertrophy
- Prostatic carcinoma
- Urethral stricture
- Functional obstruction due to neuropathic disorder.

Q. Give long term effect of BOO.
- Residual urine development
- Detrusor overactivity.

Q. Complication of BOO
1. Acute retention.
2. Chronic retention
3. Overflow incontinence.
4. Impaired bladder emptying
5. Haematuria, stone, infection
6. Diverticula formation.

Q. Investigations of men with LUTS.
1. Urine analysis by dipstick for blood, glucose, protein
2. Urine culture for infection

3. S. Creatinine
4. Urinary flow rate and residual volume measurement.

Additional

- PSA if indicated.
- Pressure flow studies.

Q. Give five strong indication of prostatectomy.

1. Acute retention in fit patient with no other cause of retention.
2. Chronic retention with renal impairment.
3. Complication of BOO stone infection, diverticula.
4. Haemorrhage
5. Elective prostatectomy for severe symptoms.

Q. Give five counselling point to men undergoing prostatectomy.

1. Retrograde ejaculation- 65%
2. Erectile impotency- 5%
3. Success rate- 65%
4. Re-operation- 15% within 8-10 yrs.
5. The morbidity rate- <0.5%

Q. Complication of prostatectomy

Local:

- Haemorrhage.
- Perforation of the bladder and capsule
- Sepsis
- Incontinence
- Retrograde ejaculation & impotency
- Urethral stricture
- Bladder neck contracture
- Re-operation

General:

- Cardiovuscular- MI, HF, atelactasis, pneumonia, DVT.
- Water intoxication
- Osteitis pubis.

Q. Give five congenital anomalies of male urethra.

- Meatal stenosis
- Congenital urethral stricture

- Congenital urethral valves
- Epispaediasis.
- Hypospaediasis.

Q. Complication of rupture membranous urethra.

- Stricture
- Urinary incontinence- due erectile impotence
- Extravasation of urine- superficial extravasion
- Orthopaedic complication.

Q. Give 5 causes of urethral stricture.

- Inflammatory – post gonorrhoeal
- Congenital
- Traumatic
- Instrumental- dilatation, indwelling catheter.
- Post-operative
    - Open prostatectomy
    - Amputation of penis.

Q. Give three precancerous conditions of penis.

- Leucoplakia of the glass
- Longstanding genital warts
- Pagets disease of the penis.

Q. Hazards of incomplete descent testis

- Sterility in bilateral cases
- Pain due to trauma
- An associated indirect inguinal hernia
- Torsion
- Epididymo-orchitis
- Atrophy
- Increased liability to malignant disease.

Scenario: Renal injury

1. Name 5 compulsory & emergency investigations
    - Plain x-ray abdomen
    - USG of abdomen
    - IVU
    - Urine R/E

- CT scan abdomen
- Blood grouping & cross matching

2. Criteria for conservative Rx:
   - Haemodynamically stable
   - Abdomen is not so tense, tender, rigid
   - No sign of intra or retroperitoneal hge

3. What are the indications for surgery?
   - Haemodynamically unstable
   - Signs of progressive blood loss
     - Increasing pulse
     - Decreasing BP
     - Decreasing amount of urine
   - Expending mass in loin

4. How clinically presents
   - H/O trauma - blunt or penetrating
   - Bruising (there may be no)
   - Local pain, tenderness
   - Haematuria some hours after injury
   - Delayed haematuria some days after injury
   - Clot colic
   - Meteorism - Abdominal distension 24-34 hrs after renal injury probably due to retroperitoneal haematoma implicating splanchnic nerve.

5. Give Mx protocol.
   - Conservative:
     - Bed rest at least 1 week after the urine clears intravenous access & volume replacement
     - Blood sampling for grouping, cross matching & BT
     - Morphine
     - Antibiotic
     - Vital signs monitoring, haematuria chart
   - Surgical:
     - Small tear - repair
     - Laceration confined to one pole - partial nephrectomy
     - Unsalvageable injury - Nephrectomy