SCENARIO: BURN

1. What is eschar?
   - A slough produced by a burn of thermal, corrosive dried tissue is called eschar.

2. How you will measure burn?

   i. Depth:
      a. Inspection: Colour, erythema, blistering, fixed capillary staining
      b. Palpation: Capillary refill, pin prick sensation

   ii. Percentage:
      a. Rule of 9
      b. Lund & Browder chart
      c. Patients whole hand (digits and palm) 1%
      d. Rule of 7 in children: Head neck 28%

3. Name dressing for deep burn.
   i. 1% silver sulphadiazine
   ii. 0.5% silver nitrate
   iii. Vaselin soaked gauze picce/paraffin gauze
   iv. Hydrocolloid (Duoderm)
   v. Amniotic membrane-chorion
   vi. Xenograft
   vii. Collagen

4. What is fluid regime for burn patient?

   i. Parkland formula
      First 24 hrs (ml) = 4 x wt in kg x % of burn → Hartmann solution
         ½ in 8 hrs
         ½ in 16 hrs
      Next 24 hrs (ml) =
         i. 2 x wt in kg x % of burn → Hartmann
         ii. 0.5 x wt in kg x % burn→ plasma or colloid + 5% DA as required to maintain urine output 0.5-1.5 ml/kg/hour

ii. Dhaka fluid therapy
First 24 hrs: Hartmann solution
Next 24 hrs:
Adult : 5% DNS
Children: 0.45% NaCl in dextrose
Infant: Baby saline - 0.225% NaCl in dextrose as required to maintain urine output 0.5-1.5 ml/kg/hour

5. What is the role of surgery in burn?

Early : Wound excision followed by skin grafting , skin grafting after granulation

Late : Release of contracture cosmetic reconstruction

SCENARIO: LYMPHOMA

1. Which type more common in organ?
   - NHL

2. What are the modalities of treatment?
   i. Chemotherapy
   ii. Radiotherapy
   iii. Surgery

3. What chemo used in NHL?
   - CHOP
     - Chyclophosphamide
     - Hydroxydaunorubicin
     - Oncovin (vircristine)
     - Prednisolone

4. Mention clinical staging of lymphoma
   Stage I : One group of lymph nodes on one side of diaphragm
   Stage II: Multiple groups of lymph nodes on one side of diaphragm
   Stage III: Multiple groups of lymphnodes on both sides of diaphrgam

Stage IV: Extra nodal involvement

Each stage is divided into A and B on the basis presence or absence of B symptoms.

A – If B symptoms absent (B symptoms - swinging pyrexia, drenching night sweat, Wt loss > 10 % with in 6 months)
B – If B symptoms present

5. What is the histological picture of Burkett's lymphoma?
   - Dense masses of lymphoblasts interspersed with large clear histiocytes containing debris from rapid cell turnover - starry sky appearance.

SCENARIO: HAND INJURY

1. Principles of Mx.
   - Rest
   - Elevation to reduce swelling
   - Splintage to avoid contracture
   - Prompt restoration of circulation
   - Local/ regional anaesthesia
   - Tourniquet use
   - Incision - should cross acute angle to flexor crease
   - Early skin cover
   - Early repair of nerve and tendon
   - Early physiotherapy

2. What is the position of ease?
   - MD joint flexed at 60-900
   - IP joint extended
   - Thumb abducted
   - Wrist is slightly dorsiflexed

3. Name 5 congenial anomalies of hand.
   - Syndactyly

- Polydactyly
- Macrodactyly
- Cleft hand
- Radial club hand
- Ulnar club hand

STATION 00

A twenty year old man presented with a glass cut injury in the right distal forearm.

On Examination:

a) A deep sharp cut wound at the ulnar border of the right forearm 4 cm above the wrist joint.
b) Numbness and loss of sensation of the little finger.
c) Several superficial cut injuries in the palm.

1. What is the nerve that has been divided?
2. State two tests to identify whether the long flexors to the ring finger have been divided?
3. What are the post operative complications that may occur following repair of that divided nerve?
4. What factors influence eventual functional outcome following repair of a peripheral nerve?'

A 20 years old man with glass cut injury in Rt distal forearm. On examination a deep sharp cut wound in ulnar border 4cm above the wrist joint. There is numbness & loss of sensation in little finger. Several cut injuries in palm.

1. What is the nerve that is divided?
   - Ulnar nerve

2. Stage 2 tests for confirming
    - Forment's sign
    - Card test

3. What is the post of complication of divided nerve repair?
    - Failure
    - Neuroma

4. What factors influence the outcome?
    - Type of lesion
    - Level of lesion
    - Age of lesion
    - Size of gap
    - Associated lesion
    - Age of patient
    - Type of nerve
    - Surgical technique:
        - Suture
        - Repair tension free or tight
        - Splinting

SCENARIO: CAUDA EQUINA SYNDROME

1. What are the clinical features?

    - For sacral roots
        - Loss of sensation in Saddle are (S3, S4) A strip down the back of the thigh & leg (S2) outer 2/3rd of the sole (S1)
        - Loss of motor power to the muscles controlling the ankle and foot
        - Loss of anal and penile reflexes, planter responses and ankle jerks
        - Bladder & bowel incontinence

    - For lumber roots

  - Loss of sensation in groins
    Entire lower limb other than that portion supplied by sacral segment.
  - Loss of motor power to the muscles controlling the hip and knee
  - Loss of cremasteric reflexes and knee jerks
- Claudication – Back pain on standing & walking
- Pericoccygeal anaesthesia
- Numbness & paraesthesia in lower limbs
- Bladder incontinence
- Bowel incontinence
- Erectile dysfunction
- Weakness of lower limbs
- Loss of anal reflex
- Loss of tendon reflexes

2. What are the causes?
   - Spinal tumour
   - Spine trauma
   - Spine TB
   - PLID
   - Spinal stenosis
   - Epidural abscess

3. What may be complications?
   - Permanent paraplegia/paralysis
   - Permanent bidder bowel incontinence
   - Recurrent UTI

SCENARIO/FIGURE: SQUAMOUS CELL CARCINOMA

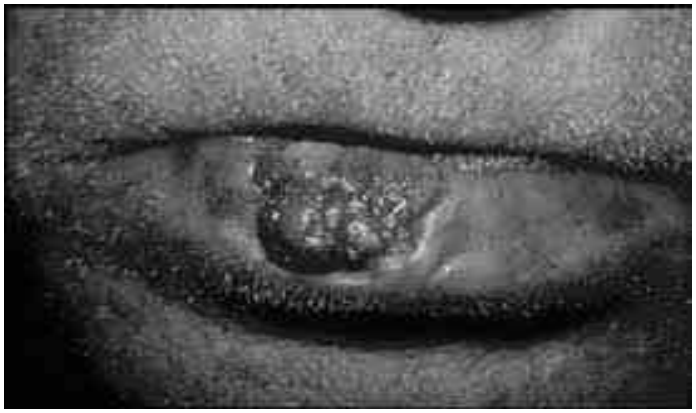


Fig: Squamous cell carcinoma in lower lip

1. What is your dx?
   - Carcinoma lower lip

2. What Rx you want to give?
   - Wide excision followed by reconstruction by nasolabial gate flap
   - Radiotherapy

3. 3 Common sites of such disease
   - Skin
   - Oesophagus
   - Anus

4. Name 5 precancerous conditions of skin
   - Actinic keratosis : Senile keratosis, Solar keratosis
   - Bowen's disease
   - Chronic scar
   - Dermatitis due to radiation
   - Erythroplasia of Querat (Paget's disease)
   - Leucoplakia
   - Xeroderma pigmentosa: Auto dominant.

STATION-00

A patient with chest injury has a water seal chest drain put in-situ.

1. What is the ideal site for inserting the chest drain
2. Where will you place the water seal bottle in relation to the patient
3. How will you identify that the water seal drain is functioning
4. The water seal bottle has filled up with fluid from the chest. State the steps of changing the bottle
5. Would you prefer a sharp dissection or a blunt dissection for this procedure after incising the skin.

CHEST DRAIN

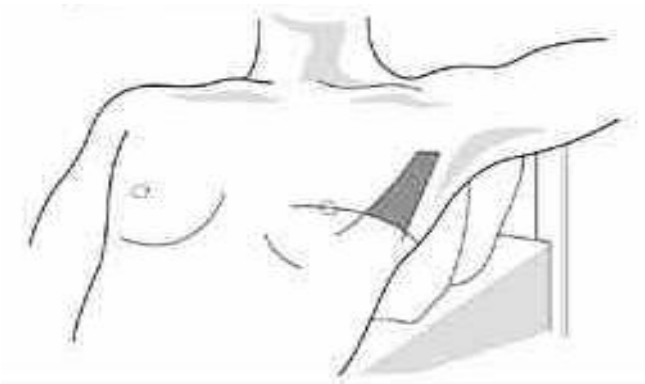


Fig: Position and site of chest drain

1. Where it is introduced, why?
   - In the triangle of safety.

- Because:
    i. There is no important structure
    ii. No chance of diaphragm injury

2. Mention boundary of triangle of safety.
    - Anterior – Anterior axillary line extending from nipple
    - Posterioly – Mid axillary line
    - Inferiorly – A horizontal line drawn posterioly from the nipple in man or 4th ICS in woman.

3. What are indications of thoracotomy regarding hge?
    - Initial draining > 100 ml
    - Continued brisk bleeding > 100 ml/15 min
    - Continued bleeding of > 200 ml/ hour for 3 or more hours
    - Rupture of bronchus, oesophagus, diaphragm or aorta
    - Cardiac tamponade if needle aspiration is unsuccessful.

4. When you will decide to remove drain?
    - Clinical a radiological evidence of full expansion of lung
    - No spontaneous bubbling for 24 hrs
    - No air bubbling on coughing
    - No movement of air column in tube

5. How the drain tube is removed? When the tube is extubated?
    - With breath bold at the depth of full inspiration.

6. How you will change water of bottle?
    - I will evacuate the battle in the following way.
        - Double clamping the tube
        - Disconnection of the bottle from the tube
        - Evacuation, washing & replacement of fluid
        - Reconnection of the bottle with the tube
        - Release of clamp

7. What are the indications of chest draining?
    - Tension pneumothorax
    - Hydropneumothorax

- Haemothorax
- Pyothorax
- Flail chest
- Surgical emphysema with rib fracture
- After thoracotomy, pneumonectomy.

8. Where you will place water seal drainage bottle?
   - Below chest level

9. How you will understand that if is working?
   - Inspection of the tube: Swinging of air column
   - Inspection of the drainage bottle:
     - Spontaneous bubbling
     - Bubbling on coughing
     - Increase in amount of fluid
10. What dissection you like — blunt or sharp?
    - Skin & subcutaneous tissue → sharp
    - Muscle → blunt intercostal, serratus anterior
    - Parietal pleura → sharp under direct vision

11. When the tube is introduced?
    - During expiration

SCENARIO OF PVD

1. Give 6 clinical features of arterial occlusion?
   - Pain
   - Pallor
   - Paraesthesia
   - Pulselessness
   - Paralysis
   - Persistently cold

2. 3 Causes of ulcer in diabetes?
   - Neuropathy

- Angiopathy
- Immunsuppression:
    - CMI depression
- Impaired:
    - Chemotaxis
    - Opsonization
    - Phagocytosis
    - Intracellular killing

3. Principles of Mx of diabetic foot/Diabetic gangrene.
    - Proper assessment of patient:
        - Assessment of diabetes status
        - Wound swab for C/S
        - Local X-ray
        - Angiogram of foot
    - Proper control of diabetes
    - Broad spectrum antibiotics
    - If unsalvageable- amputation
    - Revascularization/angioplasty

4. Structures commonly excised wrongly during lumber sympathectomy?
    - LN
    - Lymphatics
    - Genitofemoral nerve
    - Tendinous strip of psoas minor

5. DVT prophylaxis

    - Mechanical:
        - Active & passive exercise of lower limbs
        - Leg elevation
        - Intermittent preumatic compression
        - Early mobilization following surgery

    - Pharmacological:
        - LMWH S/C 20 mg 12 h before surgery & continued post operatively once daily until the pt is fully mobile at least 5 days.

- Heparin S/C 5000 u 2 h before surgery & continued post operatively 8-12 hrs until the pt is fully mobile at least 5 days.

SCENARIO/FIGURE: DISCHARGING SINUS

1. Give pictorial description in 3 points
   - Discharging sinus
   - Discharge serous colour

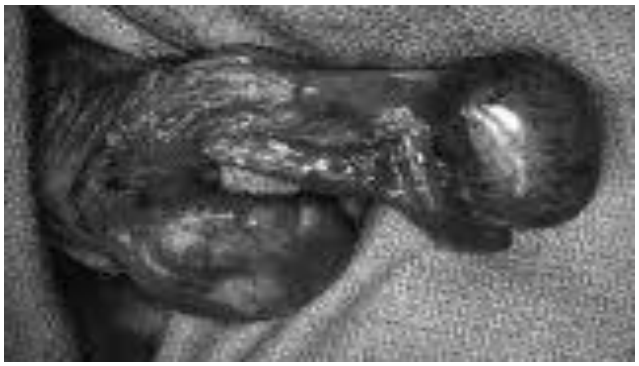
2. What is the principles of Mx?
   - Assessment:
     - Pus for c/s
     - Local X-ray
     - Sonogram
     - Biopsy
   - Treatment:
     - Regular dressing
     - Debridement if necessary
     - Antibiotic according to C/S
     - Treatment of cause

3. What may be the D/D?
   - Foreign body impaction
   - tuberculosis
   - Chronic pyogenic osteomyelitis
   - Crohn's disease
   - Actinomycosis

4. How will you confirm the Dx?
   - Biopsy & H/P

5. What may be the sequelae?
   - Chronic osteomyelitis
   - Squamous cell carcinoma

SCENARIO/FIGURE: TORSION OF TESTIS



Picture: Torsion of left testis which is surgically explored

Study the picture carefully and answer the following question.

Q.1. Mention 3 features of this picture.
Ans:1……
2 ……
3 ……

Q2: Name 3 possible clinical features of presentation of this patient?
Ans: 1……
2……
3……

Q3. Name next 3 step of surgery in this patient?
Ans: 1……
2……
3……

Check list

Q.1. Mention 3 features of this picture.
Ans: 1…Testis is surgically explored

2 … Bluish in colour, scrotum swollen.
3 … Testis is gangrenous

Q2: Name 3 possible clinical features of presentation of this patient?
Ans: 1…Pain in groin and lower abdomen
2… Vomiting/ scrotum is swollen and tense, tender
3…High up testis

Q3. Name next 3 step of surgery in this patient?
Ans: 1… Check viability
2…If viable → orchidopexy.
If non viable → orchidectomy
3 Orchidopexy opposite side.

With clinical & radiological dx you have done laparotomy for DU perforation but you did not find any perforation in duodenum & stomach.

1. Do you want to search the small gut? Why?
   - Yes. If peritoneal fluid is faeculent in colour or smell.

2. How will you bring the intestine out?
   - By extending the incision

3. The perforation is what is the surgical treatment?
   - Exteriorization + periotoneal toileting
   - Resection and anastomosis
   - Anastomosis and proximal diversion

4. How you want to close the abdomen?
   - Peritoneal toileting
   - Drain
   - Closure in layer.

5. How you will give antiseptic wash?
   - From 2 cm above nipple to symphysis pubis
   - Laterally upto mid axillary line for drain or stoma

SCENARIO: PROFUSE PR BLEEDING

1. Give 5 causes
    - Angiodysplasia
    - Ulcerative colitis
    - Diverticulitis
    - Ischemic colitis
    - Haemangioma
    - Rectal varices
    - Haemorrhoids

2. What is the principle of Mx?
    - Assessment of haemodynamic status
    - IV access and volume replacement
    - Blood sampling for grouping cross matching & BT
    - Morphine analgesic & sedative
    - Identification & treatment of cause
    - Surgery if needed

3. What are the methods of conservative treatment?
    - Bed rest
    - IV access & volume replacement
    - Blood transfusion
    - Colonoscopic diathermy coagulation

4. What are the indications of surgery?
    - Haemodynamically unstable
    - Failure of conservative treatment.

SCENARIO: RECTAL CARCINOMA

1. What are the pharmacological agents for bowel preparation?
    - Polyethylene glycol (aqualax)
    - Sodium picosulphate (picolax)
    - 20% mannitol

2. What is the prophylaxis?
   - DVT prophylaxis
   - Tetanus prophylaxis
   - Antibiotic prophylaxis

3. What is the principle of treatment?
   - Confirmation of diagnosis by H/P
   - Staging the disease
   - Treatment according to stage

SCENARIO: FISTULA IN ANO

1. Define fistula in ano.
   - A fistula that connects deeply the anal canal or rectum and superficially skin around the anus.

2. Classify fistula in ano.

Standard classification

- Low:
  - Subcutaneous
  - Submcous
  - Low anal
- High :
  - High anal
  - Pelvirectal

Parks classification (Sir Alan Parks)

- Intersphincteric
- Transsphincteric
- Supralevator/Extrasphincteric

3. What are the chemical agents used for chemical sphincterotomy?
   - Nitric oxide
   - GTN – Glycerin trinitrate (0.2% ointment)

- Botulinum toxin
- Diltiazem

4. What are the surgical treatment options?

A. Fissure in ano:

- Lateral and sphincterotomy (Notaras)
- Endo anal advancement flap

B. Fistula in ano:

- Low variety non transsphincteric
    - Fistulotomy/lay open

- High variety
    - Staged operations seton (a ligature of silk, nylon, silasticor linen)
    - Protective colostomy
    - Endoanal advancement flap
    - LIFT technique