

THE SUPERIOR COLLEGE, LAHORE
FINAL PROFESSIONAL MBBS
ANNUAL EXAMINATION 2017

SURGERY

Time Allowed: 2 hours

1. The CEO's aim is to be achieved in less than 2 hours. Copy time will not be given.
2. Head of the writing unit at the end and start of the questions will be given.
3. Do not write your name or ID card on the questions or any part of the paper.

Instructions

Roll no. 1021
By which the body is typed
of the subject
Total Marks: 50
Medical faculty
Sindh Medical College
Karachi

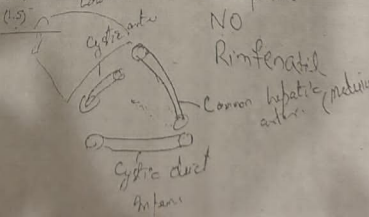
All Questions carry equal (5) Marks

- QNO 1. Discuss the surgical anatomy of elbow triangle? Describe the anomalies of cystic duct. (2.5)
- QNO 2. Define wound healing. Classify different type of wound healing. Describe the factors influencing healing of wound? (2.5)
- QNO 3. Describe the principle of triage in burn management of injured patient. Discuss the principles of primary and secondary survey in the assessment and management of trauma? (2.5)
- QNO 4. Describe in detail the fluid and nutritional consequences of intestinal resection. Discuss advantages and disadvantages of enteral feeding. (2.5)
- QNO 5. Classify burn according to depth. Describe the principles of treatment of 15% circumferential burn of upper limb? (2.5)
- QNO 6. A 50 year old male smoker presents with a non healing ulcer 1x2cm involving upper lip. Discuss differential diagnosis and treatment options? (2.5)
- QNO 7. Describe acute arterial occlusion. Discuss its various types. How you treat the patient of acute arterial occlusion? (2.5)
- QNO 8. Define varicose vein. Describe CEA? classification of chronic venous disorders. Discuss the investigations advised for a patient of chronic venous disorder? (2.5)
- QNO 9. Name four intravenous anesthetic agents. Name four analgesic agent use in anesthesia. Write the contraindication of aspirin? (2.5)
- QNO 10. Write short notes on (2.5)

- a) Necrotizing fasciitis 194
b) Drains 44
c) Paronychia 196

IV anesthetics

- Ketamine
Propofol
Thiopentone
Etomidate



Date: _____

Annual 2017 S1

Q1a) Surgical anatomy of the Calot's triangle:-

The Calot's triangle is bounded by cystic duct, the bile duct and cystic artery. Its inferior surface of the liver (upper border) formed by cystic duct (inferior border) and the bile duct (medially). Its content includes the right hepatic artery, the cystic artery, the cystic lymph nodes, connective tissue and lymphatics. This is the space which is dissected in cholecystectomy to identify cystic artery and cystic duct.

b) Anomalies of cystic artery:-

- o - Caterpillar turn (Moynihan hump):-
Right hepatic artery replaces the cystic artery within the Calot's triangle. Its ligation may result in impaired liver function.
- o - Congenital cystic artery anomalies:-
 - * Multiple cystic artery.
 - * Short cystic artery.
 - * Cystic artery inferior to the cystic duct.

Date: _____

Q2) Wound healing:-

The process in which skin through and repairs damage from wounds.

- 0- Primary closure (Healing by first intention):-
 - 1- Heals without any complication.
 - 2- Preferred method for clean wounds.
 - 3- Primary closure should be performed within 6-8 hrs of trauma but vascular areas (face, scalp) may be in 24 hrs.
- 0- Secondary closure (Healing by Secondary intention):-
 - 1- It occurs when wound is grossly contaminated and there is a significant tissue loss.
 - 2- Wound is debrided, washed and left open and heals by largely formation of granulation tissue and contraction. This tissue contracts to reduce the size of the wound and allows epithelization across its surface to achieve wound closure.
- 0- Tertiary closure (Healing by third intention):-
 - 1- Delayed closure of wound.
 - 2- Wound is contaminated by soil, manure, animal bites and cleaned, debrided and observed for 3-7 days before closure.
 - 0- The wound is left opened for more than 10 days to allow the formation of clean granulation tissue.

Date: _____

b) Factors affecting wound healing:-

- o - Diabetes
- o - Infection
- o - Drugs
- o - Nutritional problem
- o - Tissue necrosis
- o - Hypoxia
- o - Excessive tension on wound.

Q3 Triage:-

Triage is the process of determining the priority of the patient's treatment based on the severity of the condition. This rationes the patient treatment efficiently when resources are insufficient for all to be treated immediately.

Primary Surveys- The primary survey includes 5 components (ABCDE). They are evaluated & managed simultaneously in the form of a team.

- A: Airway Maintenance with Cervical spine Protection.
- B: Breathing & Ventilation.
- C: Circulation & Hemorrhage Control.
- D: Disability & Neurological Status.
- E: Exposure / Environmental Control.

Secondary Survey:- It includes head to toe examination. Detailed history examination & more advanced examination like CT-Scan etc.

Date: _____

Initially asked about few history points (AMPLE):-

A: Allergies

M: Medication

P: Past illness

L: Last meal

E: Exposure/Events

- o- High flow oxygen & ventilation is given.
- o- Immediate life threatening condition like pneumothorax and flail chest etc all identified and dealt accordingly.

Q5 Classification of Burns:-

- o- Partial thickness burn (Epidermis & dermis upto papillae) ^{layers}
 - * Superficial partial thickness burn
 - * Deep partial thickness burn.
- o- Full thickness burn (whole dermis, Leathery feel)

Management of Circumferential burn of upper limb:-

- o- Ensure the resuscitation safety.
- o- Check for other injuries (Follow ABCDE guidelines)
- o- Cool the burn wound (At 15°C)
- o- Secure the airway.
- o- Any burn require Fluid resuscitation.
- o- Any burn likely to require surgery (Ringer's acetate, Lactated Ringer's).
- o- Circumferential full thickness burn to the limb can cause eschar formation and thus compression on the vasculature (Compartment Syndrome) Emergency escharotomy should be considered.

Date: _____

26 a) D/D's:-
Basal Cell
Carcinoma

Squamous Cell
Carcinoma

Treatment:- Surgical
excision with 0.5cm
to 1-cm margins

Moh's Surgery for
Basal cell carcinoma (In
this tumor along 4-6mm
margin of uninvolved skin
is removed).

Non-Surgical:-
* Radiotherapy
* Superficial tumors can
be treated with topical
5FU or cryotherapy.

Treatment:- Surgical

o- A 5mm clearance
margin should be
achieved if the lesion
is less than 2cm
and a 1cm clearance
margin for >2cm
lesion.

o- Non Surgical
* Radiotherapy (For
in operable tumors).
o- Block dissection of
the regional lymph nodes

Q7 Acute arterial occlusion:- Sudden occlusion of
an artery is usually caused by embolus & less
frequently by thrombosis or atherosclerotic plaque.

- o- Types:-
- 1- Acute lower limb ischemia (ALI)
- 2- Embolism
- 3- Thrombosis
- 4- Atherosclerosis

Date: _____

c) Treatments:-

- o- Relieve the pain.
- o- Heparin (Immediate administration of 5000 units of heparin IV reduce the extension of thrombus and maintains the patency of surrounding vessels).
- o- Treat associated heart condition.
- o- Anti-platelet therapy (Aspirin).
- o- Embolotomy (Surgical) under local or general anaesthesia. The artery is exposed & clot is extracted with the help of Fogarty catheter (Embolotomy catheter).

CV8 Varicose vein:- They are dilated, tortuous, subcutaneous veins, often palpable, $>3\text{mm}$ in diameter measured in upright position.

o- CEAP classification:-

(Clinical - Etiology - Anatomy - Pathophysiology)

Clinical	Etiological	Anatomical	Pathophysiological
C0 - No visible or palpable signs of venous disease	Ec: Congenital Ep: Primary Es: Secondary	As: Superficial veins Ap: Perforator veins	Pr: Reflux Po: obstructive
C1 - Reticular (1-3mm) or thread veins (<1mm)	Er: No venous cause identified	Ad: Deep veins	Pr, Po: Reflux & obstructive
C2 - Varicose veins ($>3\text{mm}$)		An: No venous location	Po: No venous identified
C3 - Edema			
C4 - Skin changes (pigmentation)			

Date: _____

Investigations:-

- o - Duplex ultrasound
- o - Venography
- o - C.T Venogram

Q9 Four intra-venous agent:- Four analgesic agent in anaesthesia:-

- | | |
|-----------------|-------------------|
| o - Propofol | o - Morphine |
| o - Thiopentone | o - Dimorphine |
| o - Etomidate | o - Nitrous oxide |
| o - Ketamine | o - Rimfenetil |

Contraindication of Aspirin:-

- o - Asthma
- o - Nasal polyps
- o - Rhinitis
- o - Allergy to NSAIDs

Q10 Necrotizing Fasciitis:-

It is called non-Clostridial gas gangrene (necrosis of skin & fascia with preservation of muscles). This is life threatening condition of skin & subcutaneous tissue characterized by necrosis of deep fascia.

Type 1:- Polymicrobial etiology.

Type 2:- Single organism infection caused by β -hemolytic group A streptococci (*Streptococcus pyogenes*).

Date: _____

- b) Drains:- They are used for the removal of anti-cipated fluid collection. These should be remove early as they introduce infection.
- o- Surgical drain
 - o- NG tube
 - o- Chest drain.

c) Paronychia:-

It is the infection of nail fold. The nail fold is red, swollen and tender and there may be pus underneath. When there is no pus antibiotics is the treatment. Pus requires incision & drainage.