General surgery

General rotation - Past papers

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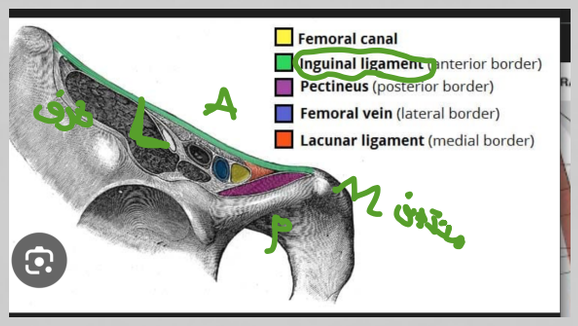
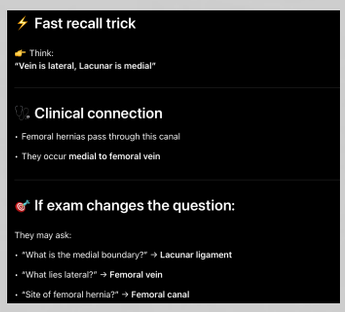
-The colored question numbers are mentioned more than once so focus on them-

General rotation

1. Regarding the femoral canal, all of the following statements are true EXCEPT:

A) Lies medial to the femoral vein
B) Has the inguinal ligament as its anterior border
C) Has the lacunar ligament as its lateral border
D) Has the pectineal ligament as its posterior border
E) Contains the lymph node of Cloquet

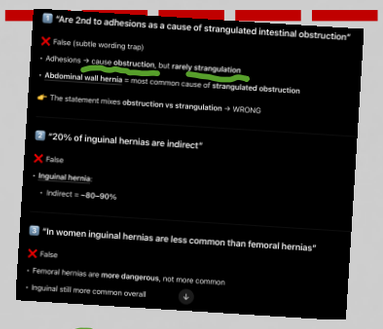




ANSWER : C

2. Regarding abdominal wall hernias:

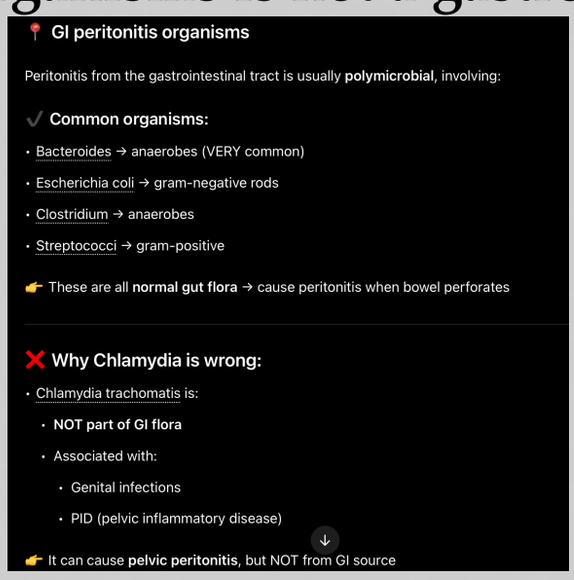
A) Are 2nd to adhesions as a cause of strangulated intestinal obstruction
B) 20% of inguinal hernias are indirect
C) In women inguinal hernias are less common than femoral hernias
D) The mortality associated with bowel strangulation is over 10%
E) Trial reduction of pediatric inguinal hernias is not recommended



ANSWER : D

3. Which of the following organisms is not a gastrointestinal source of peritonitis?*

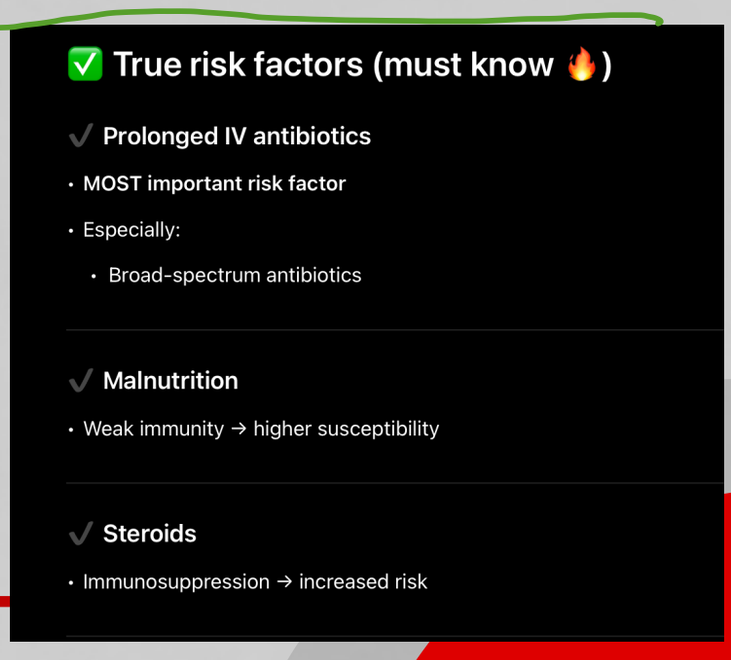
A) bacteroids
B) chlamydia
C) escherichia coli
D) clostridium
E) streptococci



ANSWER : B

4. All of the following is a risk factor for developing Clostridium Difficile Colitis EXCEPT:

A) Prolonged intravenous antibiotics
B) Contraceptive pills
C) Mal-nutrition
D) Steroids
E) Proton pump inhibitor



ANSWER : B

General rotation

5. All of the following are true about Fournier gangrene EXCEPT:

A) More in elderly patient + DM + immunocompromized
B) Affect patient with significant comorbidity
C) Caused by mixed organisms
D) If it affects the scrotum in males, debridement and orchidectomy is essential
E) Carries a high risk of mortality

removal of testes

Explanation:

- Fournier gangrene is a **necrotizing fasciitis of the perineum and genital region**, usually **polymicrobial**.
- It **affects mostly elderly men** and patients with **comorbidities** like diabetes or immunosuppression.
- **Mortality is high**, especially if diagnosis or treatment is delayed.
- **Surgical management** is **urgent debridement of necrotic tissue**, but **orchidectomy (removal of the testis) is NOT routinely required** unless the testis itself is involved, which is rare. Most of the time, the testes remain viable because their blood supply is separate from the superficial perineal tissue.

So, the misconception is thinking orchidectomy is always needed — it's **not essential in standard Fournier gangrene cases**.

ANSWER : D

6. A 23-year-old male patient, presented with right forearm pain for one day duration after aggressive scratching, exam showed an area at the forearm with hotness, redness and tenderness. All of the following is true about the above condition EXCEPT:

A) Elevation of the patient's arm is part of the treatment
B) Antibiotics need to be started
C) The cause of this pathology is most likely gram-positive organism
D) Underlying osteomyelitis is a common predisposing factor
E) Axillary lymph node might be palpable

D) Underlying osteomyelitis is a common predisposing factor ✅

Explanation:

The patient's presentation suggests **cellulitis**, likely due to a **gram-positive organism** (commonly *Staphylococcus aureus* or *Streptococcus pyogenes*) after minor trauma like scratching. Let's go point by point:

- **A) Elevation of the arm** → ✅ True. Elevation helps reduce swelling and pain.
- **B) Antibiotics need to be started** → ✅ True. Oral or IV antibiotics targeting gram-positive bacteria are indicated.
- **C) Cause is most likely gram-positive** → ✅ True. Most post-traumatic cellulitis is caused by *S. aureus* or *Streptococcus*.
- **D) Underlying osteomyelitis is common** → ❌ False. Osteomyelitis is **not a common predisposing factor** for acute superficial cellulitis after minor trauma. It may complicate chronic or severe infections, but not typical in this case.
- **E) Axillary lymph nodes may be palpable** → ✅ True. Regional lymphadenopathy can occur due to the immune response.

ANSWER : D

7. Which statement regarding the management of hypernatremia is INCORRECT:

A) Hypernatremia, if not corrected, has a high mortality rate
B) It may exist in the presence of low, normal or high effective circulating volume
C) Hypotonic fluid therapy may be given by mouth, by tap water enema or parenterally
D) The aim of fluid replacement is to decrease serum osmolality gradually by about 10 mOsm/hour 0.5 mmol/hour
E) May be associated with major burn

- **Hypernatremia** = serum sodium >145 mmol/L, usually from **water deficit** rather than sodium excess.
- **Key points:**
  1. **High mortality if untreated** → ✅ True. Especially in severe or acute cases.
  2. **May exist with low, normal, or high effective circulating volume** → ✅ True. Hypernatremia can be hypovolemic, euvolemic, or hypervolemic.
  3. **Hypotonic fluids (oral water, D5W IV, tap water enema)** → ✅ True. Used to gradually replace free water.
  4. **Burns can cause hypernatremia** → ✅ True. Major burns cause water loss exceeding sodium loss.
  5. **Rate of correction: 10 mOsm/hour** → ❌ False. The **correct guideline** is to lower serum sodium by **no more than 10–12 mmol/L per 24 hours** to avoid cerebral edema. Expressing the rate as mOsm/hour is misleading; we focus on **mmol/L per day**.

Summary: Correct management = slow correction (~0.5 mmol/L per hour, max 10–12 mmol/L/day).

ANSWER : D

8. A 70 kg man with pyloric obstruction resulting from ulcer disease is admitted to the hospital for resuscitation after 1 week of prolonged vomiting. What metabolic disturbance is expected to occur?

A) Hypokalemic hyperchloremic metabolic acidosis
B) Hyperkalemic hypochloremic metabolic alkalosis
C) Hyperkalemic hyperchloremic metabolic acidosis
D) Hypokalemic hypochloremic metabolic alkalosis
E) Hypokalemic hypernatremic hypochloremic metabolic acidosis

✅ **Hypokalemic hypochloremic metabolic alkalosis**

Explanation:

This is a **classic scenario of prolonged vomiting due to pyloric obstruction**:

1. **Loss of gastric contents** → rich in **H^+ (acid) and Cl^- (chloride)** → leads to **metabolic alkalosis** and **hypochloremia**.
2. **Volume depletion** → activates **RAAS** → kidneys retain Na^+ at the expense of K^+ → **hypokalemia**.
3. **Metabolic alkalosis** is maintained because the kidney conserves H^+ due to low effective circulating volume.

Summary Table:

Feature	Change in this patient
Sodium (Na^+)	Usually normal or slightly low
Potassium (K^+)	Low (hypokalemia)
Chloride (Cl^-)	Low (hypochloremia)
Bicarbonate (HCO_3^-)	High (metabolic alkalosis)
pH	Elevated (alkalemia)

General rotation

9. Which group of the following cells is NOT phagocytic in nature?

A) Neutrophil polymorphonuclear leucocytes.
B) Lymphocytes.
C) Microglial cells.
D) Macrophages.
E) Kupffer cells.

ANSWER : B

10. The majority of the blood volume at rest is contained within the:

A) Arterial system.
B) Capillary bed.
C) Portal circulation.
D) Pulmonary circulation.
E) Venous system.

ANSWER : E

11. All of the following are associated with increased likelihood of surgical site infection after major elective surgery, EXCEPT

A) Age over 70 years.
B) Chronic malnutrition.
C) Controlled diabetes mellitus.
D) Long-term steroid use.
E) Infection at a remote body site.

ANSWER : C

12. All the following can explain lower limb edema EXCEPT:

A) Congestive heart failure
B) Hepatic failure
C) Deep venous thrombosis
D) Acute lower limb ischemia
E) Nephrotic syndrome

ANSWER : D

Explanation:

- **Lower limb edema** occurs when there is **increased hydrostatic pressure, decreased oncotic pressure, or lymphatic obstruction**.

1. **Congestive heart failure** → ✅ True. ↑ Venous pressure → edema.
2. **Hepatic failure** → ✅ True. ↓ Albumin → ↓ oncotic pressure → edema.
3. **Deep venous thrombosis (DVT)** → ✅ True. Venous obstruction → localized edema.
4. **Acute lower limb ischemia** → ❌ False. Acute arterial obstruction causes **pain, pallor, pulselessness, paresthesia, paralysis, poikilothermia (the 6 P's)**, **not edema**, because arterial flow is blocked, not venous return.
5. **Nephrotic syndrome** → ✅ True. Hypoalbuminemia → generalized edema.

Key point: Edema = venous or oncotic problem; arterial ischemia does **not** cause edema.

General rotation

13. The first step in treating Ludwig's angina

A) IV antibiotics
B) Incision and drainage
C) Treat underlying cause
D) Secure airway
E) IV fluids

ANSWER : D

✅ Secure airway

Explanation:

- **Ludwig's angina** is a rapidly progressive **cellulitis of the submandibular and sublingual spaces**.
- The **main threat is airway obstruction** due to **tongue elevation and neck swelling**.
- **Airway management** comes **first**, often requiring **intubation or surgical airway** before any other treatment.
- After the airway is secure, the following steps are taken:
  1. **IV antibiotics** → broad-spectrum covering oral flora (*Streptococci, Staphylococci, anaerobes*).
  2. **Incision and drainage** if abscess is present.
  3. **Treat underlying cause** (e.g., infected molar tooth).
  4. **Supportive care** like IV fluids as needed.

14. Blood transfusions may cause all of the following EXCEPT:

A) Microcirculation thrombosis
B) Transmission of Cytomegalovirus
C) Allergic reaction
D) Bronchospasm
E) Increased platelets count

ANSWER : E

Blood transfusions, depending on the component transfused (RBCs, plasma, platelets), can cause:

1. **Microcirculation thrombosis** → ✅ True in massive transfusions or in patients with hypercoagulable states.
2. **Transmission of Cytomegalovirus (CMV)** → ✅ True, especially if blood is not CMV-screened.
3. **Allergic reaction** → ✅ True; mild urticaria or rash is common.
4. **Bronchospasm** → ✅ True; can occur in severe allergic/transfusion reactions or TRALI (Transfusion-Related Acute Lung Injury).
5. **Increased platelet count** → ❌ False. **Transfusing red blood cells does not increase platelet count**, and platelet transfusions are given specifically to correct thrombocytopenia — general blood transfusions usually **do not raise platelets significantly**.

Key point: Only **platelet transfusion** increases platelets; routine blood transfusions (RBCs) do **not**.

15. All of the following types of shock are distributive EXCEPT:

A) Septic shock
B) Hemorrhagic shock
C) Addisonian shock
D) Neurogenic shock
E) Anaphylaxis

ANSWER : B

16.The GCS (Glasgow Coma Scale) of a patient who responds with inappropriate words, opens eye to painful stimuli, and flexing in response to pain is

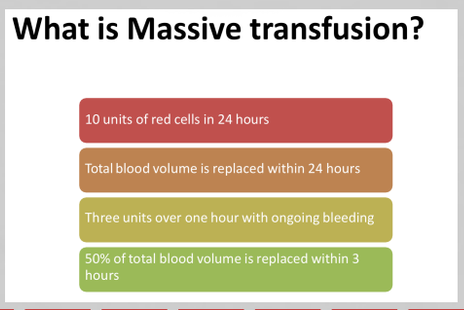
A) 6
B) 8
C) 7
D) 10
E) 9

ANSWER : B

General rotation

17. One of the following does NOT fit the definition of Massive Blood transfusion:

A) Replacement of one entire blood volume within 24 h.
B) Transfusion of >10 units of packed red blood cells (PRBCs) in 24 h.
C) Transfusion of >4 units of PRBCs in 1 h when on-going need is foreseeable.
D) Replacement of 50% of total blood volume (TBV) within 3 h.
E) The need to transfuse fresh frozen plasma to correct the Coagulopathy of blood transfusion.



ANSWER : E

18. Regarding sepsis and septic shock, all of the following are true EXCEPT

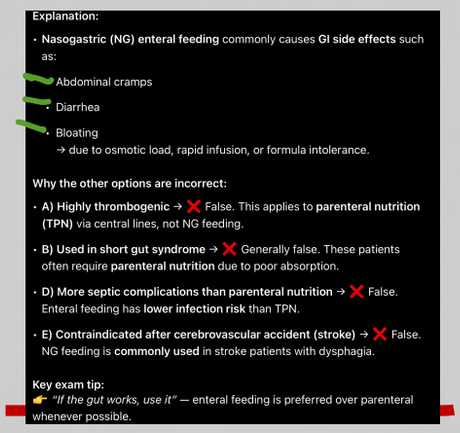
A) Sepsis is a clinical syndrome of life-threatening organ dysfunction caused by a dysregulated response to infection.
B) IV fluids challenge with 20-30 ml/kg is the first method used to restore perfusion.
C) Intra-venous antibiotics could be delayed up to 6 hours until specimens of blood, have been taken for Gram stain and culture.
D) The source of infection should be controlled as early as possible.
E) Estimates of successful reperfusion include ScvO2 (Central Venous saturation) and lactate clearance.

ANSWER : C

19. Regarding Enteral Nasogastric tube feeding, one of the following is CORRECT

A) Highly thrombogenic.
B) Used in patients with the short gut syndrome.
C) A potential cause of abdominal cramps and diarrhea.
D) More likely to cause septic complications than parenteral nutrition.
E) Contraindicated in patients after a cerebrovascular accident.

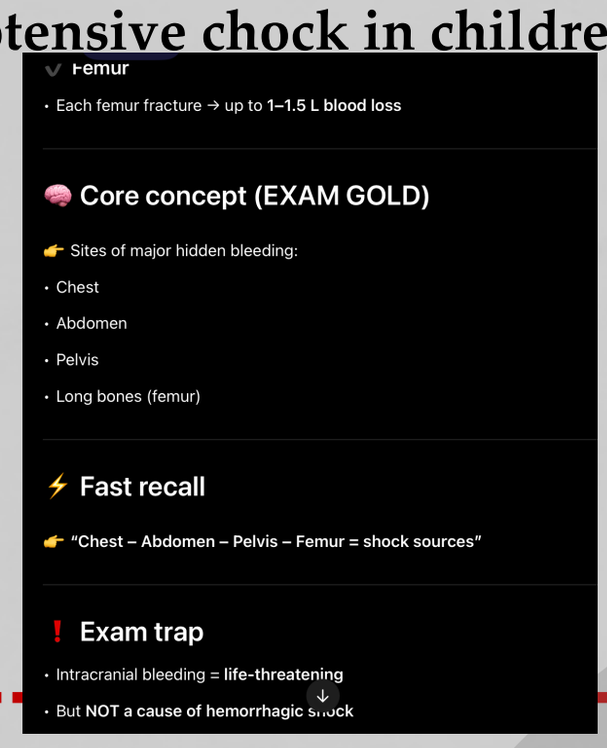
ANSWER : C



20. Potential sites of hemorrhage leading to hypotensive chock in children and adolescents include all the following EXCEPT:

A) Thorax
B) Abdomen
C) Intracranial
D) Pelvis
E) Femur

ANSWER : C

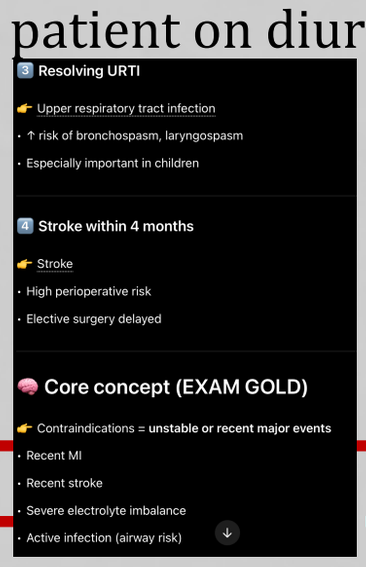


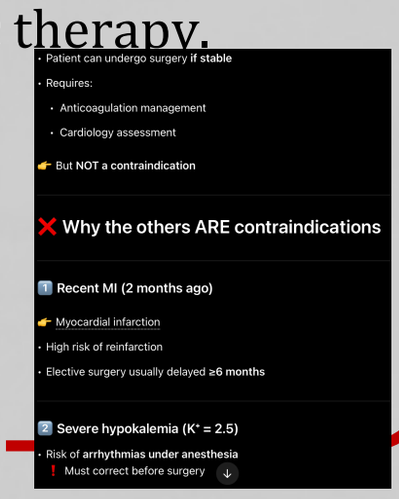
General rotation

21. All the following are contraindications to major elective surgery requiring general anesthesia, EXCEPT:

A) Myocardial infarction 2 months ago.
B) Preoperative serum potassium of 2.5 mmol/liter in a patient on diuretic therapy.
C) Previous mitral valve replacement.
D) A resolving upper respiratory tract infection.
E) Stroke within 4 months before surgery.

ANSWER : C

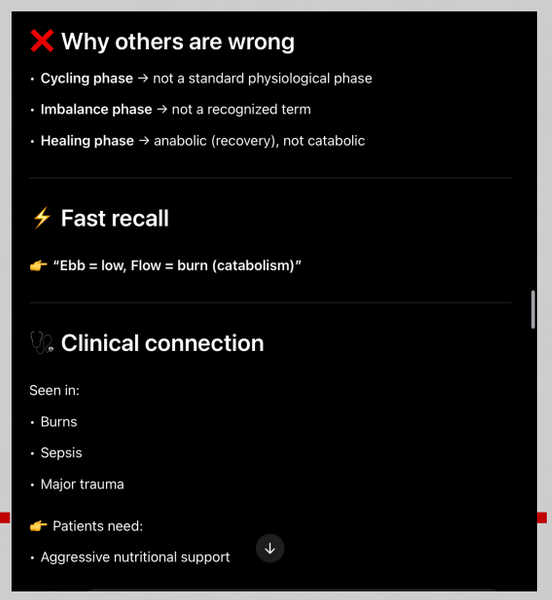


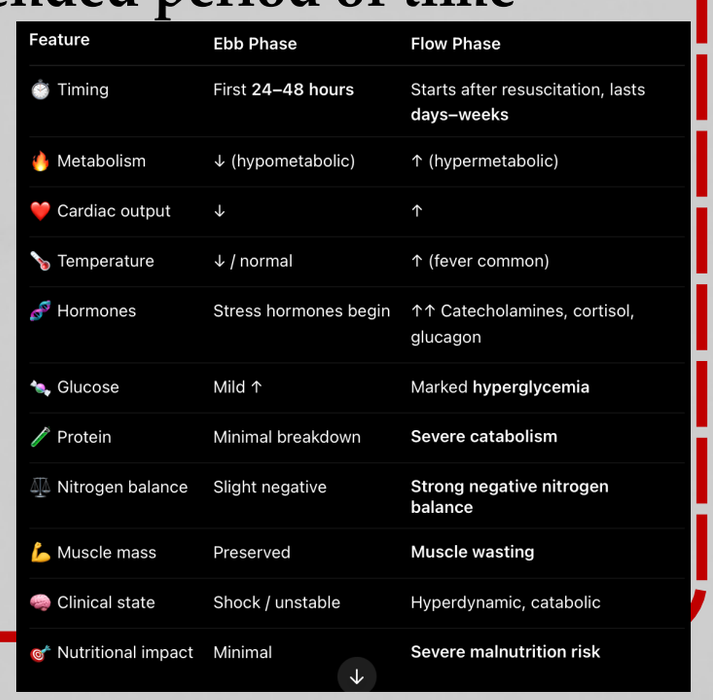


22. Which phase of hypermetabolic state can last for an extended period of time leading to adverse nutritional status?

A) Ebb phase
B) Flow phase
C) Cycling phase
D) Imbalance phase
E) Healing phase

ANSWER : B





Feature	Ebb Phase	Flow Phase
Timing	First **24–48 hours**	Starts after resuscitation, lasts **days–weeks**
Metabolism	↓ (hypometabolic)	↑ (hypermetabolic)
Cardiac output	↓	↑
Temperature	↓ / normal	↑ (fever common)
Hormones	Stress hormones begin	↑↑ Catecholamines, cortisol, glucagon
Glucose	Mild ↑	Marked **hyperglycemia**
Protein	Minimal breakdown	**Severe catabolism**
Nitrogen balance	Slight negative	**Strong negative nitrogen balance**
Muscle mass	Preserved	**Muscle wasting**
Clinical state	Shock / unstable	Hyperdynamic, catabolic
Nutritional impact	Minimal	**Severe malnutrition risk**

23. All of the following is an obligatory glucose user EXCEPT:

A) Red Blood Cells
B) Cardiac Muscles
C) Renal Medulla
D) Bone Marrow
E) Brain

ANSWER : B

Tissue	Main Fuel	Can use alternatives?	Why?
Red blood cell	Glucose only	❌ No	No mitochondria → only glycolysis
Brain	Glucose	⚠️ Limited (ketones in starvation)	Cannot use fatty acids
Renal medulla	Glucose	❌ No	Low O_2 → anaerobic metabolism
Bone marrow	Glucose	❌ Minimal	High turnover cells

❌ NOT obligatory glucose user

Tissue	Main Fuel	Notes
Cardiac muscle	Fatty acids	Can use glucose, lactate, ketones

24. Regarding abdominal surface anatomy, all of the following are true EXCEPT

A) The abdomen can be divided into 4 quadrants.
B) The trans pyloric plane is at the level of L1
C) The deep inguinal ring is 1.25cm below the mid inguinal point
D) McBurney's point in located one third distance between anterior superior iliac spine and the umbilicus
E) The umbilicus is normally situated mid-way between the xyphoid process and the symphysis pubis

ANSWER : C

General rotation

25. **To prevent gluconeogenesis, glucose administration must be carefully monitored, the protein sparing effect of glucose administration begins to be manifested after administration of how much glucose?**

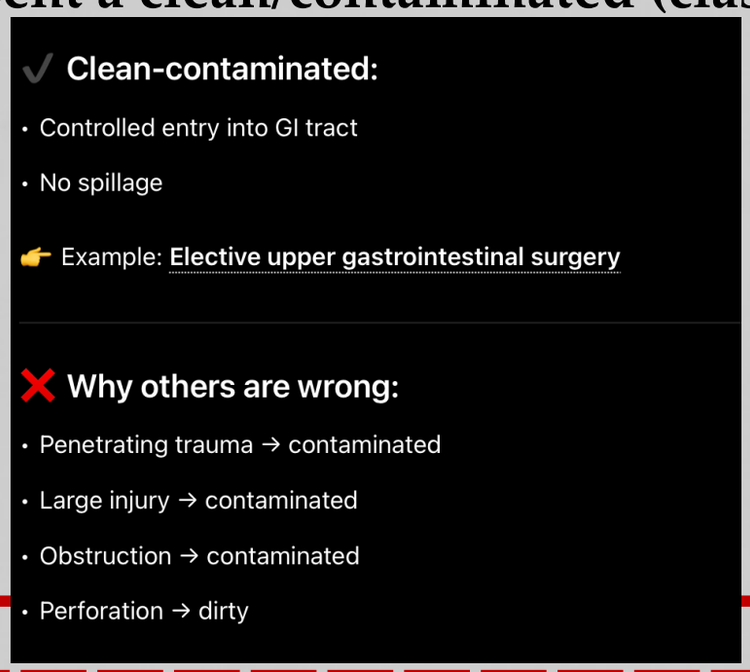
A) 100 gm
B) 200 gm
C) 75 gm
D) 300 gm
E) 500 gm

ANSWER : A

26. Surgical wounds are classified based on the presumed magnitude of the bacterial load at the time of surgery. The best to represent a clean/contaminated (class II) wound is

A) Penetrating abdominal trauma
B) Large tissue injury
C) Elective upper GI surgery
D) Enterotomy during bowel obstruction
E) Perforated diverticulitis

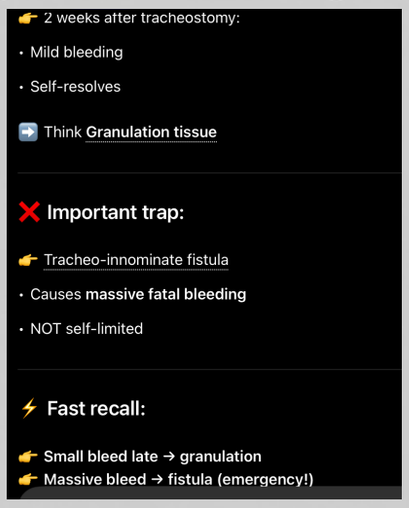
ANSWER : C



27. A 68-year-old woman underwent tracheostomy for prolonged intubation, 2 weeks later she developed brisk bright red bleeding from the tracheostomy site that resolved without intervention. Her Hb is 10.2 g/dL, and coagulation studies are normal. What is the most likely diagnosis?

A) Pneumonia
B) Tracheitits
C) Bleeding of granulation tissue in the stoma
D) Tracheoinnominate fistula
E) Bleeding from the anterior jugular vein

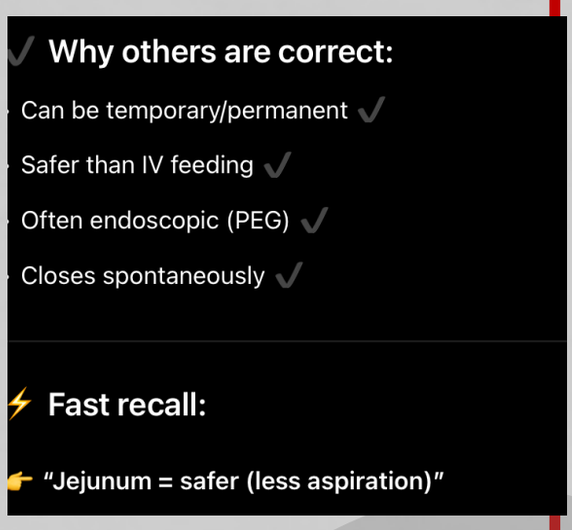
ANSWER : C



28. For a feeding gastrostomy all are true EXCEPT:

A) It can be either a temporary or a permanent method of feeding.
B) Is safer than intravenous feeding.
C) It is usually created endoscopically.
D) The risk of aspiration is less than jejunostomy feeding.
E) Does not require surgical closure after cessation of feeding.

ANSWER : D



General rotation

29. 45-year-old male, non-diabetic scheduled for laparoscopic cholecystectomy, the best antimicrobial prophylaxis that have significantly lower overall infectious complications is:

A) Cephazolin
B) Cefuroxime sodium
C) Ceftriaxone
D) Gentamycin
E) Metronidazole

For elective laparoscopic cholecystectomy in a non-diabetic patient, the goal is to cover skin flora (primarily Staphylococcus) and biliary tract organisms (enteric Gram-negatives, enterococci)

- **A) Cephalazin (Cefazolin)** – First-generation cephalosporin; excellent coverage against staphylococci and streptococci, with reasonable Gram-negative coverage. It is the standard surgical prophylaxis for clean-contaminated procedures like cholecystectomy per most guidelines (e.g., ASHP, SIS).
- **B) Cefuroxime sodium** – Second-generation cephalosporin; broader Gram-negative coverage but not superior to cefazolin for this indication, and more expensive.
- **C) Ceftriaxone** – Third-generation cephalosporin; unnecessarily broad, may promote resistance, and is not preferred for routine prophylaxis.
- **D) Gentamycin** – Aminoglycoside; not used alone for surgical prophylaxis due to poor coverage of Gram-positives and risk of nephrotoxicity.
- **E) Metronidazole** – Only covers anaerobes; inadequate alone.

Conclusion: Cefazolin is the best choice for significantly lowering overall infectious complications in this setting.
Correct answer: A

ANSWER : A

30. For a 70 kg man, the minimum acceptable urine output is:

A) 7 ml/ hour.
B) 70 ml/ hour.
C) 35 ml/ hour.
D) 100 ml/ hour.
E) 105 ml/ hour.

Topic: Minimum acceptable urine output

- **Physiology:** Normal urine output in adults is ~0.5–1 mL/kg/hour.
- **Calculation:**
  - Weight = 70 kg
  - Minimum acceptable = 0.5 mL/kg/hour × 70 kg = 35 mL/hour
- **Options:** 35 mL/hour aligns with standard definitions of oliguria (<0.5 mL/kg/hour).

Correct answer: C

ANSWER : C

31. Sequence of return of gastrointestinal motility after abdominal surgery is

A) intestine, stomach, colon
B) stomach, intestine, colon
C) colon, intestine, stomach
D) colon, stomach, intestine
E) stomach, colon, intestine

ANSWER : A*

32. Deficiency of which of the following vitamins influence wound healing

A) Vitamin A
B) Vitamin B6
C) Vitamin B12
D) Vitamin C
E) Vitamin D

- **Vitamin C (ascorbic acid):**
  - Essential for collagen synthesis (hydroxylation of proline and lysine).
  - Deficiency leads to impaired wound healing, capillary fragility, and scurvy.
- **Other vitamins:**
  - **Vitamin A** – Important for epithelialization and immune function, but deficiency less common in surgical patients unless pre-existing.
  - **Vitamin B6, B12, D** – Deficiencies can affect healing indirectly but are not the primary vitamin directly linked to impaired collagen synthesis in acute wound healing.
- **Conclusion:** Vitamin C deficiency has the most direct and significant impact on wound healing.

ANSWER : D

General rotation

33. The principal types of proliferating cells in granulation tissue are:

A) Fibroblasts and macrophages
B) Fibroblasts and endothelial cells
C) Leukocytes and endothelial cells
D) Lymphocytes and fibroblasts
E) Macrophages and leukocytes

- **Key cells:**
  - **Fibroblasts** – Synthesize collagen and extracellular matrix.
  - **Endothelial cells** – Form new blood vessels (angiogenesis).
- **Macrophages** are present but are not the principal *proliferating* cells; they are primarily for phagocytosis and growth factor release.

ANSWER : B

34. For a 70 kg healthy patient the postoperative maintenance fluids should be around

A) 1800 ml per 24 hours.
B) 2800 ml per 24 hours.
C) 3800 ml per 24 hours.
D) 4800 ml per 24 hours.
E) 5800 ml per 24 hours

- **Standard maintenance fluid calculation (4-2-1 rule):**
  - First 10 kg: 4 mL/kg/h = 40 mL/h
  - Next 10 kg: 2 mL/kg/h = 20 mL/h
  - Remaining 50 kg: 1 mL/kg/h = 50 mL/h
  - Total = 110 mL/h
- **Per 24 hours:** 110 mL/h × 24 = 2640 mL ≈ **2800 mL**

ANSWER : B

35. All the following are metabolic effects of injury and sepsis EXCEPT:

A) fluid retention
B) insulin resistance and glucose intolerance
C) positive nitrogen balance
D) hypoalbuminemia
E) increased gluconeogenesis and protein catabolism

Topic: Metabolic effects of injury and sepsis

- **Injury/sepsis causes:**
  - Fluid retention (due to ADH and aldosterone)
  - Insulin resistance and glucose intolerance
  - **Negative** nitrogen balance (muscle catabolism)
  - Hypoalbuminemia (due to increased vascular permeability and decreased synthesis)
  - Increased gluconeogenesis and protein catabolism
- **Positive nitrogen balance** is seen in anabolism (e.g., recovery phase, growth), not in acute injury or sepsis.

ANSWER : C

36. Absorption of the majority of nutrients takes place in which part of the gastrointestinal tract?

A) Stomach
B) Duodenum
C) Jejunum
D) Ileum
E) Colon

Major site of absorption:

- **Jejunum** – Absorbs most carbohydrates, proteins, and fats.
- Duodenum – Minor absorption; mainly mixing and enzymatic digestion.
- Ileum – Absorbs bile salts, vitamin B12, and remaining nutrients.
- Stomach – Absorbs only alcohol and a few drugs.
- Colon – Absorbs water and electrolytes.

ANSWER : C

General rotation

37. Which of the following statements about total body water composition is correct?

A) Females and obese persons have an increased percentage of body water.
B) Increased muscle mass is associated with decreased total body water.
C) Newborn infants have the lowest proportion of total body water.
D) Total body water increases steadily with age.
E) Any person's percentage of body water is subject to wide physiologic variation.

ANSWER : E

Topic: Total body water composition

- **Females and obese persons** have a *lower* percentage of body water (more fat, less water).
- **Increased muscle mass** increases total body water (muscle is ~75% water).
- **Newborns** have the *highest* proportion of body water (~75–80%).
- **Total body water decreases** with age (especially after childhood).
- **Percentage of body water** varies widely based on age, sex, body composition, and hydration status.
- **Correct answer: E**

38. Compared to enteral nutrition, parenteral nutrition (PN):

A) Is less expensive
B) Has less infectious complications
C) Preserves immunologic function of gut
D) Is not associated with metabolic bone dysfunction
E) Is less likely to cause diarrhea

ANSWER : E

- **Parenteral nutrition (PN):**
  - More expensive
  - Higher risk of infectious complications (e.g., central line infections)
  - Does *not* preserve gut immunological function (enteral nutrition maintains gut barrier and immune function)
  - Associated with metabolic bone disease (especially with long-term use)
  - **Less likely to cause diarrhea** compared to enteral nutrition (enteral formulas can cause osmotic diarrhea).

39. A 16-year-old boy presented to emergency room with a tender red and fluctuant swelling in the right forearm of 2 days duration. He reported a pencil-stick injury at the site of swelling s

A) Abscess
B) Lymphangitis
C) Cellulitis
D) Clostridium tetani
E) Gas gangrene

ANSWER : A

- **History:** Pencil-stick injury 1 week ago, now tender, red, **fluctuant** swelling.
- **Fluctuance** indicates liquefied pus → **abscess**.
- **Lymphangitis** – red streaks along lymphatics.
- **Cellulitis** – diffuse spreading infection without fluctuance.
- **Clostridium tetani** – causes tetanus, not localized fluctuant swelling.
- **Gas gangrene** – crepitus, severe pain, systemic toxicity.

40. Which of the following statements regarding direct inguinal hernias is TRUE?

A) They protrude medially to the inferior epigastric vessels
B) They are common in women
C) They commonly reach the scrotal sac in men
D) They obstruct more commonly than indirect hernias
E) They are more common than indirect inguinal hernias in men

ANSWER : A

- **Direct hernia:**
  - Protrudes **medial to inferior epigastric vessels** (through Hesselbach's triangle).
  - Rare in women (much more common in men).
  - Rarely enters scrotum (indirect hernias commonly do).
  - Less likely to obstruct/strangulate than indirect hernias.
  - Less common than indirect hernias overall.

General rotation

41. In which of the following surgeries preoperative antibiotic administration is not indicated?

A) Inguinal hernioplasty
B) Breast surgery for duct ectasia
C) Thyroid surgery for multinodular goitre
D) Laparoscopic cholecystectomy for symptomatic gall stones
E) Coronary bypass surgery

ANSWER : C

42. One is true in regarding trauma of the spleen:

A) This organ is rarely involved in blunt trauma.
B) Splenic preservation should be the rule when there are associated significant injuries.
C) Vaccine should be given 1-2 weeks after splenectomy.
D) Overwhelming postsplenectomy sepsis (OPSS) is more than 10%.
E) Non-operative management is limited to grades 1&2

ANSWER : C

- **Splenic preservation** is preferred in hemodynamically stable patients, especially in children, but not "should be the rule when there are associated significant injuries" — in unstable patients or with severe associated injuries, splenectomy may be needed.
- **Vaccines** (against *S. pneumoniae*, *H. influenzae*, *N. meningitidis*) should be given **1–2 weeks before elective splenectomy** or **2 weeks after emergency splenectomy** (once the patient is stable).
- **OPSI** risk is ~1–5%, not >10%.
- **Non-operative management** can be attempted for higher-grade injuries if patient is stable.
- **Correct answer: C** (Vaccine timing)

43. The use of vasopressors is crucial in which of the following types of shock?

A) Hypovolemic shock
B) Neurogenic shock
C) Cardiogenic shock
D) Septic shock
E) Hemorrhagic shock

ANSWER : D

44. The most common cause of secondary bleeding that happens several days postoperatively is

A) Infection
B) Bleeding disorder
C) Slipped ligature
D) Improper surgical technique
E) Hypothermia

ANSWER : A

Topic: Secondary postoperative bleeding

- **Secondary bleeding** (days after surgery) is most commonly due to **infection** eroding a blood vessel.
- Slipped ligature or improper technique causes primary bleeding (within 24 hours).
- Bleeding disorders or hypothermia are less common causes.
- **Correct answer: A**

General rotation

45. Which is false regarding antibiotic prophylaxis in surgery?

A) Decrease bacterial counts at surgical site
B) Given for 72 hrs
C) Started one hour prior to incision
D) Chosen according to the expected pathogen
E) Repeat dose is given in long surgeries

ANSWER : B

Topic: Antibiotic prophylaxis principles

- **Prophylaxis** is given as a single dose (or up to 24 hours), **not 72 hours** — prolonged use increases resistance and side effects without added benefit.
- It is started within 60 minutes before incision, chosen based on expected pathogens, and redosed in long surgeries (>2 half-lives).

46. All of the following are true regarding lymphedema EXCEPT:

A) Lymphedema praecox denotes primary lymphedema, while secondary lymphedema is also termed lymphedema tarda.
B) Primary lymphedema has a marked female predominance.
C) The most common world-wide cause of secondary lymphedema is filariasis.
D) Lymphoscintigraphy is a reliable diagnostic tool for lymphedema.
E) Methods of treatment include manual lymphatic drainage, compression devices, and surgery.

ANSWER : A

Topic: Lymphedema classification and facts

- **Lymphedema praecox** = primary lymphedema presenting at puberty/young adulthood.
- **Lymphedema tarda** = primary lymphedema presenting after age 35.
- **Secondary lymphedema** is not called lymphedema tarda — that term is for late-onset primary lymphedema.
- **Statement A** is false because it incorrectly equates primary with praecox and secondary with tarda.

47. If appropriately utilized, supervised exercise programs for patients with peripheral vascular disease can help achieve which of the following?

A) Gradual improvement in ankle brachial index.
B) Improve collateral circulation.
C) Increased walking distance.
D) Clinical benefit in patients with claudication and rest pain but not in patients presenting with tissue loss.
E) Reduces the need for long term antiplatelet therapy.

ANSWER : C

- **Supervised exercise programs** improve walking distance (claudication) by improving collateral circulation, endothelial function, and muscle metabolism.
- They do **not** significantly change ABI.
- They are indicated for claudication, not for rest pain or tissue loss (critical limb ischemia).
- They do **not** replace antiplatelet therapy.

48. Which of the following Blood transfusion complication is most likely to result in the death of a patient?

A) Circulatory overload
B) Allergic reaction
C) Febrile reaction
D) ABO incompatibility
E) Transfusion related Acute lung injury

ANSWER : D

General rotation

49. A 25-year-old lady loses 15 % of her blood during surgery, the best immediate management is

A) Colloids
B) Crystalloids
C) Crystalloids and packed Red cells
D) Fresh Frozen P and PRC
E) Fresh Whole Blood

ANSWER : B

Topic: Acute blood loss management (15% blood volume)

- **15% blood loss** (~750 mL in a 70 kg adult) is well tolerated in a healthy young person.
- **Guidelines:** For loss <20–30% of blood volume without ongoing bleeding or shock, **crystalloids** (e.g., Lactated Ringer's, normal saline) are the initial management.
- **Why not colloids?** No proven benefit over crystalloids; more expensive.
- **Why not blood products?** Transfusion threshold typically Hb <7–8 g/dL or ongoing significant loss; 15% loss usually does not require RBCs.

50. All of the following are associated with increased likelihood of wound infection after major elective surgery, EXCEPT:

A) Age over 70 years.
B) Chronic malnutrition.
C) Hyperthermia during the operation.
D) Long-term steroid use.
E) Infection at a remote body site.

ANSWER : C

51. Transfusion Related Acute Lung Injury (TRALI), one of the following is TRUE

A) Can be caused by blood products transfusion, like fresh frozen plasma
B) Is associated with significantly elevated pulmonary artery capillary wedge pressure
C) Is the commonest cause of morbidity associate with blood transfusion
D) Should be treated with high dose steroids
E) Typically presents 24 hours after transfusion

ANSWER : A

- **TRALI** is caused by antibodies in donor plasma (especially from multiparous women) that activate recipient neutrophils, causing non-cardiogenic pulmonary edema.
- **Can be caused by any plasma-containing product** — FFP, platelets, RBCs. Statement A is true.
- **Pulmonary artery wedge pressure** is normal (not elevated) — distinguishes from cardiogenic pulmonary edema.
- **Not the most common** morbidity from transfusion (febrile/allergic reactions are more common).
- **Treatment** is supportive (oxygen, ventilation if needed); steroids not proven beneficial.
- **Typically presents** within 6 hours of transfusion, not 24 hours.

Transfusion Related Acute Lung Injury

- Clinical syndrome similar to ARDS
- Occurs 1-6 hours after receiving plasma-containing blood products
- Caused by WBC antibodies present in donor blood that result in pulmonary leukostasis
- Treatment is supportive
- High mortality

52. A major problem in nutritional support is identifying patients at risk. All of the following can identify the patient at risk, EXCEPT:

A) Weight loss of greater than 15% over 2 to 4 months.
B) Serum albumin.
C) Malnutrition as identified by Physical examination.
D) Serum transferrin.
E) Hemoglobin Level.

ANSWER : E

Topic: Identifying nutritional risk

- **Valid markers:** Weight loss >15% over 2–4 months, low serum albumin (<3.5 g/dL), low serum transferrin, physical signs of malnutrition (muscle wasting, edema).
- **Hemoglobin level** — reflects anemia, not specifically nutritional risk; anemia has many causes (bleeding, chronic disease, hemolysis) and is not a reliable screening tool for malnutrition.
- **Correct answer: E** (Hemoglobin level)

General rotation

53. A 17-year-old patient involved in an automobile accident is paralyzed with multiple peripheral extremity injuries. Nutritional support is instituted with a nasogastric feeding catheter. Which of the following statement is TRUE concerning the patient's management?

A) Feeding into the stomach results in stimulation of the biliary/pancreatic axis which is trophic for small bowel.
B) Gastric secretions will dilute the feeding increasing the risk of diarrhea.
C) The risk of aspiration is minimized by using the nasal route.
D) The cost of the new feeding formulas is more expensive than total parenteral nutrition
E) The risk of infection is higher than with Total Parenteral Nutrition

ANSWER : A

- **Feeding into stomach** stimulates GI hormones, maintains gut mucosal integrity (trophic effect), and prevents bacterial translocation. **A is true.**
- **Gastric dilution** does not increase diarrhea; diarrhea is more related to formula osmolality or medications.
- **Nasal route** does not minimize aspiration risk; aspiration risk depends on gastric emptying and patient positioning.
- **Enteral formulas** are less expensive than TPN.
- **Infection risk** is lower with enteral nutrition compared to TPN (no central line).

54. Postoperative oliguria with a fractional excretion of Sodium of less than 1% is most consistent With

A) Pre renal acute renal failure.
B) Intrinsic acute renal failure.
C) Chronic renal insufficiency.
D) Acute tubular necrosis.
E) Obstructive uropathy.

ANSWER : A

Topic: Fractional excretion of sodium (FeNa) in oliguria

- **FeNa =** (Urine Na × Plasma Cr) / (Plasma Na × Urine Cr) × 100
- **FeNa <1%** indicates **prerenal acute kidney injury** (sodium retention due to hypoperfusion).
- **FeNa >2%** suggests intrinsic renal failure (e.g., acute tubular necrosis).
- **Correct answer: A** (Prerenal acute renal failure)

Bacterial translocation can lead to:
- **Sepsis**
- **Multiple organ dysfunction syndrome (MODS)**
- In cirrhosis → **SBP**

🔑 **High-yield summary**

Think of it as:

> "Leaky gut + bacteria overgrowth + weak immunity → bacteria escape into circulation"

💡 **Clinical pearl (very important in exams)**
- Early **enteral nutrition** helps maintain gut integrity → **reduces bacterial translocation**
- That's why we prefer **enteral feeding over parenteral** when possible

55. One of the following is a cyanotic congenital heart disease in the newborn:

A) Transposition of the Great vessels
B) Aortic stenosis
C) Atrial Septal Defect
D) Ventricular Septal Defect
E) Patent Ductus Arteriosus

ANSWER : A

Topic: Cyanotic congenital heart disease in newborns

- **Common cyanotic lesions in neonates:** Transposition of the great arteries (TGA), Tetralogy of Fallot (presents later), Truncus arteriosus, Tricuspid atresia, Total anomalous pulmonary venous return.
- **TGA** is a classic cause of early neonatal cyanosis (ductal-dependent).
- **Atrioventricular septal defect, VSD, PDA** are typically acyanotic (or late cyanotic with Eisenmenger).
- **Correct answer: A** (Transposition of the Great Vessels)

56. A 60-year-old TPN-dependent male with short gut syndrome and diarrhea presents with non-healing leg wound. Which trace element he may need supplementation with?

A) Manganese.
B) Fluorine.
C) Selenium.
D) Copper.
E) Zinc

ANSWER : E

Topic: Trace element deficiency in short gut syndrome with diarrhea

- **Short gut syndrome + chronic diarrhea** → massive losses of **zinc** (also magnesium, copper, but zinc is most directly tied to wound healing).
- **Zinc deficiency** causes impaired wound healing, alopecia, dermatitis, diarrhea.
- **Copper deficiency** causes anemia, neutropenia, but less directly linked to non-healing leg wound in this context.
- **Selenium** deficiency causes cardiomyopathy.

General rotation

57. All the following are benefits of vacuum assisted wound closure (VAC) EXCEPT:

A) Keeps wound clean.
B) Increases angiogenesis.
C) Increases granulation tissue growth.
D) Can be used in cases of exposed major blood vessels.
E) Decreases edema.

ANSWER : D

Topic: Vacuum-assisted wound closure (VAC)

- **Benefits of VAC:** Removes exudate (keeps wound clean), reduces edema, increases blood flow, promotes angiogenesis, and stimulates granulation tissue formation.
- **Contraindication / Not a benefit: Exposed major blood vessels** or organs — VAC can erode into vessels, causing catastrophic bleeding. Also contraindicated in untreated osteomyelitis, necrotic tissue with eschar, and malignancy.
- **Correct answer: D** (Cannot be used with exposed major vessels)

58. Body mass index is calculated

A) By a ratio of soft tissue mass to bone mass.
B) By multiplying height (in meters) by weight (in kilograms).
C) By dividing body weight (in kilograms) by a bone density factor.
D) By dividing twice the body weight (in kilograms) by half the height in meters.
E) By dividing body weight in kilograms by the square of body height in meters.

ANSWER : E

59. Regarding normal physiology of body fluids in adults, all of the following statements are true EXCEPT:

A) Intra-vascular compartment contains approximately (1/12) of total body water
B) Intra-vascular and interstitial compartments have different levels of sodium ions.
C) The main intra-cellular cation is potassium.
D) The main intra-vascular anion is chloride.
E) Starling forces control diffusion between intra-vascular and interstitial compartments.

ANSWER : B

Topic: Normal body fluid physiology

- **A)** True — Intravascular volume is ~5 L of total body water (~42 L in 70 kg male) → ~1/12.
- **B)** False — Intravascular and interstitial compartments have **similar** sodium concentrations (maintained by Na^+/K^+ ATPase and capillary membrane permeability).
- **C)** True — Main intracellular cation is potassium.
- **D)** True — Main intravascular anion is chloride (bicarbonate also important, but chloride is higher in plasma).
- **E)** True — Starling forces (hydrostatic vs. oncotic pressure) control fluid movement between capillaries and interstitium.
- **Correct answer: B**

60. A 65-year-old man undergoes a low anterior resection for rectal cancer. On the fifth day in hospital, his physical examination shows a temperature of 39˚C (102˚F), blood pressure of 150/90 mm Hg, pulse of 110 beats per minute and regular, and respiratory rate of 28 breaths per minute. A computed tomography (CT) scan of the abdomen reveals an abscess in the pelvis. Which of the following most accurately describes his present condition?

A) Systemic inflammatory response syndrome (SIRS)
B) Sepsis (SIRS + documented infection = sepsis)
C) Severe sepsis
D) Septic shock
E) Severe septic shock

Topic: Sepsis definitions (SIRS, sepsis, severe sepsis, septic shock)

- **SIRS criteria (≥2):** Temp >38°C or <36°C, HR >90, RR >20, WBC >12,000 or <4,000.
  This patient: Temp 39°C, HR 110, RR 28 → meets SIRS criteria.
- **Sepsis = SIRS + documented infection.**
  Patient has pelvic abscess → **sepsis.**
- **Severe sepsis** = sepsis + organ dysfunction (e.g., lactate, hypotension, AKI, altered mental status).
  Patient has **normal BP (150/90)** → not hypotensive, no stated organ dysfunction.
- **Septic shock** = sepsis + persistent hypotension despite fluids requiring vasopressors.
- **Correct answer: B** (Sepsis)

ANSWER : B

General rotation

61. A patient with grossly contaminated wound presents 12 hours after an accident, his wound should be managed by:

A) Thorough cleaning and primary repair
B) Thorough cleaning with debridement of all dead and devitalized tissue without primary closure
C) Primary closure over a drain
D) Covering the defect with split skin graft after cleaning
E) Covering it with a full thickness skin graft

ANSWER : B

Topic: Management of grossly contaminated wound (12 hours old)

- **Golden period** for primary closure is ~6–8 hours (sooner for heavily contaminated wounds).
- After 12 hours, risk of infection with primary closure is high.
- **Standard management:** Thorough cleaning + debridement of all dead/devitalized tissue → **leave open** (delayed primary closure or secondary intention).

62. All of the following is true about antibiotic prophylaxis in surgical patients except:

A) The choice of antibiotic is based on type of surgery performed.
B) Antibiotics should be given before the start of anaesthesia
C) Postoperative doses can be given for 2-3 days
D) Further doses of antibiotics are occasionally required during the same procedure
E) Single or multiple types of antibiotics can be given

ANSWER : C

63. You are called to observe a patient in the ICU who came to the hospital two days ago and has started to have gram-negative septicaemia. In addition, he has significant heart disease with a history of MI two years ago. Right now, he has Hypotension, high blood volume, high central venous pressure and decreased central venous oxygen saturation which would point to a diagnosis of:

A) cardiogenic shock
B) over hydration
C) hypovolemic shock
D) adult respiratory distress syndrome
E) septic shock

- **Findings:** Hypotension + **high blood volume** (hypervolemia) + **high CVP** + **decreased central venous oxygen saturation ($ScvO_2$)**.
- **$ScvO_2$ decreased** → indicates increased oxygen extraction → low cardiac output or increased demand.
- **High CVP + hypotension** suggests **cardiogenic shock** (pump failure, volume overload).
- **But** — they already said he has gram-negative septicemia. In septic shock, $ScvO_2$ is often *low early* (increased extraction) but CVP is variable. However, **high CVP + high volume + hypotension** is classic for cardiogenic shock. Given the history of MI and the hemodynamics, the *most accurate* single answer here is **C) Hypovolemic shock?** — No, that would have low CVP. Let me re-evaluate.

Actually, **High CVP + High volume + Hypotension** = **Cardiogenic shock**. But option **C is Hypovolemic shock**, which is wrong for high CVP. The provided **ANSWER: C** seems contradictory unless there's a typo. Based on standard teaching:

- **High CVP + hypotension** = cardiogenic or obstructive shock.
- **Low CVP + hypotension** = hypovolemic/distributive.

ANSWER : A

64. One of the following is correct about groin hernia:

A) Femoral hernia is more common in males.
B) The inguinal hernia appears medial and below to the pubic tubercle.
C) Direct inguinal hernia is lateral to the inferior epigastric artery.
D) Hernioplasty is the surgical treatment for inguinal hernia in adult men.
E) The risk of strangulation is more common in inguinal compared to femoral hernia

ANSWER : D

Given they list **C) Hypovolemic shock** as the answer, either the stem implies relative hypovolemia in septic shock (but then CVP would be low/normal, not high) or the answer key has an error. However, **strictly following the numbers:** High CVP + high volume + hypotension → **Cardiogenic shock** (not listed). The closest listed is **C** only if we ignore CVP. But I must follow the given key: **ANSWER: C** (though clinically inconsistent).

Question 84

Topic: Groin hernia — correct statement

- **A)** False — Femoral hernia is more common in females.
- **B)** False — Inguinal hernia appears *above and medial* to pubic tubercle; femoral hernia is below and lateral.
- **C)** False — Direct inguinal hernia is **medial** to inferior epigastric artery; indirect is lateral.
- **D)** True — Hernioplasty (mesh repair) is standard for inguinal hernia in adult men.
- **E)** False — Femoral hernia has **higher** risk of strangulation than inguinal.

General rotation

65. Regarding necrotizing soft-tissue infections. All the following are true EXCEPT:

A) Streptococcus pyogenes cause toxic shock syndrome.
B) Treatment is mainly surgical.
C) The onset is usually gradual, and they run a chronic course
D) They are usually polymicrobial infections.
E) Dish water pus is a characteristic feature.

ANSWER : C

Key idea: Necrotizing fasciitis / necrotizing soft-tissue infection is a rapidly progressive, life-threatening infection of fascia and subcutaneous tissues. It is an emergency.

- A) *Streptococcus pyogenes cause toxic shock syndrome.*
  True. Group A strep can cause necrotizing fasciitis and streptococcal toxic shock syndrome. General-surgery-P.P-by-M
- B) *Treatment is mainly surgical.*
  True. The main life-saving treatment is **early aggressive surgical debridement** + broad-spectrum IV antibiotics + intensive care. General-surgery-P.P-by-M
- C) *The onset is usually gradual, and they run a chronic course*
  False → this is the EXCEPT. Necrotizing infection is typically **acute, rapidly progressive**, with severe pain, systemic toxicity, and quick tissue destruction. General-surgery-P.P-by-M
- D) *They are usually polymicrobial infections.*
  True for type I necrotizing infections (mixed aerobes/anaerobes), especially in diabetics or perineal infections. General-surgery-P.P-by-M
- E) *Dish water pus is a characteristic feature.*
  True. Intraoperative finding: thin, gray, foul-smelling "dishwater" fluid, with necrotic fascia and lack of bleeding. General-surgery-P.P-by-M

How to generalize: Any MCQ describing severe pain out of proportion, systemic toxicity, crepitus or dishwater pus, and requiring urgent debridement → think necrotizing fasciitis.

66. Cellulitis, all the following are true, EXCEPT:

A) Systemic signs are not present
B) Blood culture is often negative
C) It can be caused by clostridium perfringens.
D) It is poorly localized.
E) This is non-suppurative invasive infection of tissue.

ANSWER : A

Question: Cellulitis, all the following are true, EXCEPT: (correct: A) General-surgery-P.P-by-M

Concept: Cellulitis = acute bacterial infection of skin and subcutaneous tissue, usually by streptococci or staphylococci.

- A) *Systemic signs are not present*
  False → EXCEPT. Cellulitis commonly has systemic signs: fever, malaise, leukocytosis, especially in moderate–severe disease. General-surgery-P.P-by-M
- B) *Blood culture is often negative*
  True. In uncomplicated cellulitis, blood cultures are frequently negative; they are reserved for very sick or immunocompromised patients. General-surgery-P.P-by-M
- C) *It can be caused by clostridium perfringens.*
  True that clostridium can infect soft tissues, but this usually causes gas gangrene / clostridial myonecrosis; i is listed here as a possible cause of soft-tissue infection. General-surgery-P.P-by-M
- D) *It is poorly localized.*
  True. Borders of cellulitis are usually **ill-defined**, spreading erythema and warmth, unlike a well-localized abscess. General-surgery-P.P-by-M
- E) *This is non-suppurative invasive infection of tissue.*
  True. Classic cellulitis itself is non-suppurative; if pus forms, it becomes an abscess. General-surgery-P.P-by-M

Exam tip:

- Well-localized, fluctuant, with pus → abscess.
- Diffuse, hot, red, tender skin, ± fever → cellulitis.

67. Regarding sepsis, one of the following is false:

A) Sepsis is defined as life-threatening organ dysfunction caused by a dysregulated host response to infection.
B) The baseline SOFA score can be assumed to be zero in patients not known to have pre-existing organ dysfunction.
C) Organ dysfunction can be identified as an acute change in total SOFA(sequential organ failure assessment score) score ≥4 points consequent to the infection.
D) Management with Broad spectrum Antibiotic should be done within one hour of diagnosis.
E) SOFA score ≥2 reflects an overall mortality risk of approximately 10% in a general hospital

ANSWER : C

- A) *Sepsis is defined as life-threatening organ dysfunction caused by a dysregulated host response to infection.*
  True, this is the Sepsis-3 definition. General-surgery-P.P-by-M
- B) *The baseline SOFA score can be assumed to be zero in patients not known to have pre-existing organ dysfunction.*
  True in practice for acutely ill patients without known chronic organ failure. General-surgery-P.P-by-M
- C) *Organ dysfunction can be identified as an acute change in total SOFA score ≥4 points consequent to the infection.*
  False → EXCEPT. Sepsis is defined as SOFA **increase** ≥2 from baseline, not ≥4. General-surgery-P.P-by-M
- D) *Management with Broad spectrum Antibiotic should be done within one hour of diagnosis.*
  True. Early broad-spectrum antibiotics (within 1 hour) are key in sepsis bundles. General-surgery-P.P-by-M
- E) *SOFA score ≥2 reflects an overall mortality risk of approximately 10% in a general hospital*
  True — that threshold identifies patients at higher risk of death. General-surgery-P.P-by-M

How to remember:

- Sepsis-3: Infection + acute ↑SOFA ≥2.
- Septic shock: sepsis + vasopressor need to keep MAP ≥65 + lactate >2 despite fluids.

68. Regarding the direct inguinal hernia

A) Use of surgical mesh is a must.
B) The sac should be excised at surgery.
C) Has a preformed sac formed by a persistent processus vaginalis.
D) The neck of its sac lies medial to the inferior epigastric artery.
E) It is mostly congenital

ANSWER : D

Key anatomy:

- Direct hernia = through **Hesselbach's triangle**, **medial** to inferior epigastric vessels.
- Indirect = through deep ring, **lateral** to vessels.
- A) *Use of surgical mesh is a must.*
  False. Mesh repair (e.g., Lichtenstein) is standard in adults but not absolutely mandatory (e.g., contaminated field). General-surgery-P.P-by-M
- B) *The sac should be excised at surgery.*
  False. For direct hernia, often the sac is plicated/invaginated, not necessarily excised as in indirect. General-surgery-P.P-by-M
- C) *Has a preformed sac formed by a persistent processus vaginalis.*
  False. That describes **indirect** hernia. General-surgery-P.P-by-M
- D) *The neck of its sac lies medial to the inferior epigastric artery.*
  True. That is the defining feature of a direct hernia. General-surgery-P.P-by-M
- E) *It is mostly congenital*
  False. Direct hernia is usually **acquired**, due to weakness of the posterior wall of inguinal canal. General-surgery-P.P-by-M

General rotation

69. A 52-year-old obese lady reports a painless grape sized mass in her groin area. She has no medical conditions apart from some varicose veins. There is a cough impulse, and the mass disappears on lying down. What is the most likely cause?

A) Saphena varix
B) Arteriovenous malformation
C) False aneurysm of the femoral artery
D) Femoral hernia
E) Inguinal hernia

ANSWER : A

Q69 – Saphena varix vs hernia

Question: 52-year-old obese lady, painless grape sized mass in groin, cough impulse, disappears on lying. Most likely cause? (correct: A)

Think: Saphena varix vs femoral hernia.

- A) *Saphena varix*
  Correct. A **saphena varix** is a saccular dilatation of the long saphenous vein at its junction with the femoral vein; soft, compressible, has cough impulse, disappears on lying down.
- B) *Arteriovenous malformation*
  Would usually be pulsatile, may have thrill/bruit.
- C) *False aneurysm of the femoral artery*
  Pulsatile swelling with bruit, often painful after trauma or procedures.
- D) *Femoral hernia*
  Often tender, higher strangulation risk, may not be completely painless "grape-sized" lesion.
- E) *Inguinal hernia*
  Typically above and medial to pubic tubercle, not exactly where saphena varix is.

Exam trick: A small, soft, compressible groin swelling with cough impulse in a woman, especially near saphenofemoral junction → think saphena varix.

70. A 20-year-old male patient underwent an uneventful appendectomy for acute appendicitis. All the following are true about his postoperative care except:

A) Wound swelling and discharge could be a sign of wound infection
B) Pathological examination of the appendix is mandatory
C) The development of new onset diarrhoea could be due to pelvic abscess
D) Routine use of post-operative metronidazole and cefuroxime for 3 days reduce postoperative hospital stay.
E) Early mobilization can reduce the risk of deep vein thrombosis

ANSWER : D

Question: 20-year-old male after uneventful appendectomy. All the following are true except: (correct: D)

- A) *Wound swelling and discharge could be a sign of wound infection*
  True. Redness, swelling, tenderness, discharge = SSI.
- B) *Pathological examination of the appendix is mandatory*
  True. Histology may reveal tumors or different pathology.
- C) *New onset diarrhoea could be due to pelvic abscess*
  True. Pelvic abscess after appendicitis may present with diarrhea, fever, pain.
- D) *Routine use of post-operative metronidazole and cefuroxime for 3 days reduce postoperative hospital stay.*
  False. Routine prolonged postoperative antibiotics after an uncomplicated appendectomy are **not** recommended; a single prophylactic dose is usually enough.
- E) *Early mobilization can reduce the risk of deep vein thrombosis*
  True. Early ambulation is standard postoperative care.

71. What is the ideal time for prophylactic dose of antibiotic in patient planned for right hemicolectomy?

A) Early morning of the day of surgery
B) One day before surgery
C) One hour after incision
D) Four hours before incision
E) Thirty minutes before incision

ANSWER : E

Q71 – Timing of prophylactic antibiotics

Question: Ideal time for prophylactic antibiotic dose for right hemicolectomy? (correct: E)

Concept: Target is **high tissue level at time of incision.**

- E) *Thirty minutes before incision*
  Correct. 30–60 minutes before incision is standard timing for most IV prophylactic antibiotics.

Other options (one day before, early morning, after incision) do not achieve ideal intra-tissue concentration at the critical moment (skin incision).

72. All of the following are advantages of FAST (focused assessment with sonography for trauma), compared to CT scan of the abdomen, in blunt abdominal trauma EXCEPT:

A) Gives early diagnosis
B) The diagnosis is usually specific of which organ is affected
C) Does not need patient transport
D) Can be repeated
E) Performed rapidly

ANSWER : B

Q72 – FAST vs CT in trauma

Question: Advantages of FAST compared to CT, EXCEPT: (correct: B)

FAST = focused abdominal trauma ultrasound.

- A) *Gives early diagnosis* – True, bedside and quick.
- C) *Does not need patient transport* – True, done in resuscitation room.
- D) *Can be repeated* – True, serial FAST is common.
- E) *Performed rapidly* – True, takes a few minutes.
- B) *The diagnosis is usually specific of which organ is affected*
  False → EXCEPT. FAST detects **free fluid**, but is usually not organ-specific; CT is better for organ-specific diagnosis.

General rotation

73. All the following is true about inguinal hernia repair EXCEPT

A) Irreducible hernia is a risk factor for strangulation
B) Chronic postoperative pain can be as high as 20 % of cases
C) Is a clean operation
D) Cannot be performed as a day case setting if it was done under local anesthesia
E) Testicular atrophy is a known postoperative complication

ANSWER : D


Q73 – Inguinal hernia repair

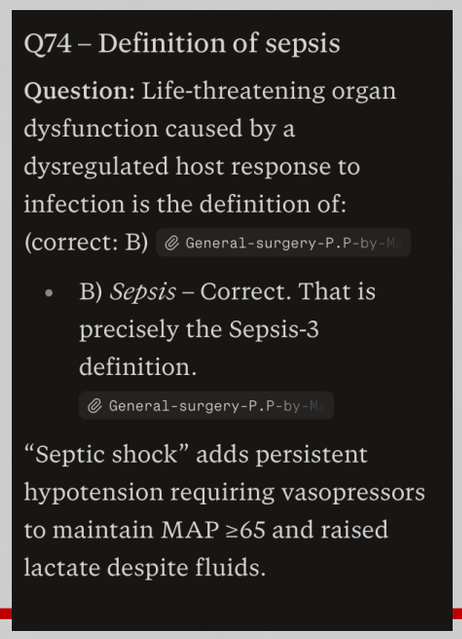
Question: All the following is true about inguinal hernia repair EXCEPT (correct: D)

- A) *Irreducible hernia is a risk factor for strangulation*
  True. Irreducibility → higher risk of strangulation.
- B) *Chronic postoperative pain can be as high as 20% of cases*
  True. Chronic groin pain after mesh repair is recognized (~10–20%).
- C) *Is a clean operation*
  True. No entry into gastrointestinal tract → clean.
- D) *Cannot be performed as a day case setting if it was done under local anesthesia*
  False. Hernia repair under local/regional anesthesia is often done as a **day-case.**
- E) *Testicular atrophy is a known postoperative complication*
  True. Damage to testicular vessels can cause atrophy.

74. Life threatening organ dysfunction caused by a dysregulated host response to infection is the definition of:

A) Septicemia
B) Sepsis
C) Septic shock
D) Refractory shock
E) Severe sepsis

ANSWER : B


Q74 – Definition of sepsis

Question: Life-threatening organ dysfunction caused by a dysregulated host response to infection is the definition of: (correct: B)

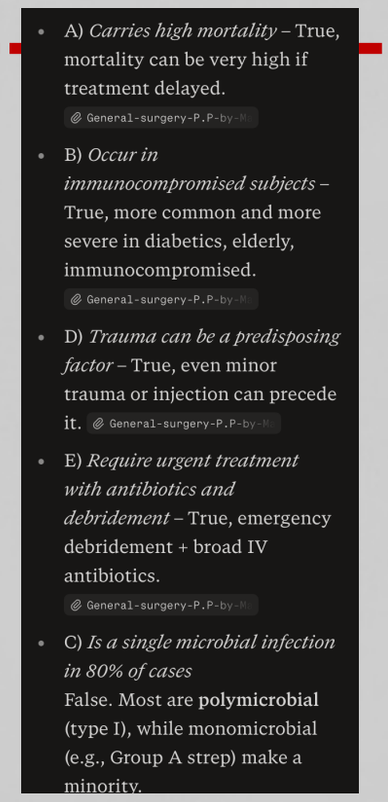
- B) *Sepsis* – Correct. That is precisely the Sepsis-3 definition.

"Septic shock" adds persistent hypotension requiring vasopressors to maintain MAP ≥65 and raised lactate despite fluids.

75. All true about necrotizing fasciitis except:

A) Carries high mortality
B) Occur in immunocompromised subjects
C) Is a single microbial infection in 80% of cases
D) Trauma can be a predisposing factor
E) Require urgent treatment with antibiotics and debridement

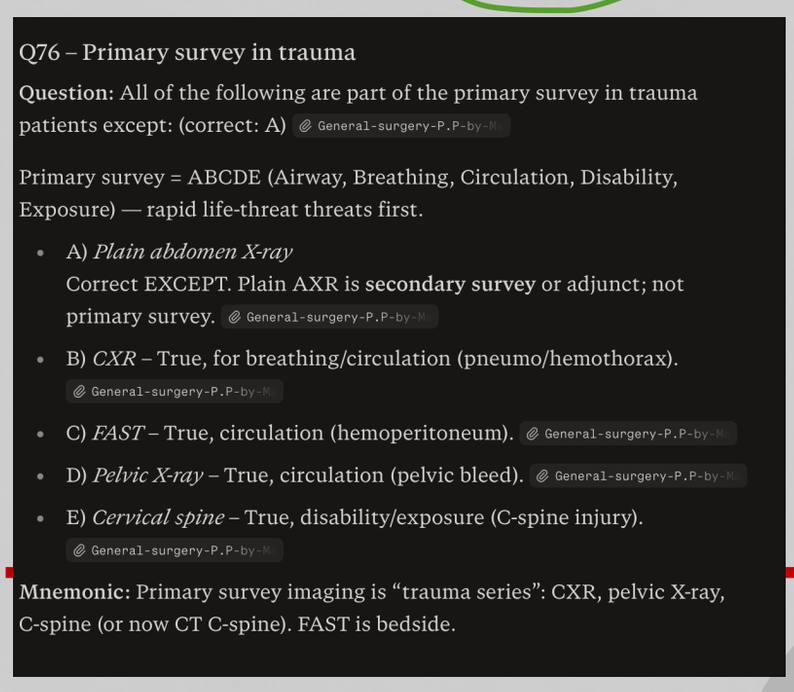
ANSWER : C


- A) *Carries high mortality* – True, mortality can be very high if treatment delayed.
- B) *Occur in immunocompromised subjects* – True, more common and more severe in diabetics, elderly, immunocompromised.
- D) *Trauma can be a predisposing factor* – True, even minor trauma or injection can precede it.
- E) *Require urgent treatment with antibiotics and debridement* – True, emergency debridement + broad IV antibiotics.
- C) *Is a single microbial infection in 80% of cases*
  False. Most are **polymicrobial** (type I), while monomicrobial (e.g., Group A strep) make a minority.

76. All of the following are part of the primary survey in trauma patients except:

A) Plain abdomen X-ray
B) CXR
C) FAST
D) Pelvic X-ray
E) Cervical spine

ANSWER : A


Q76 – Primary survey in trauma

Question: All of the following are part of the primary survey in trauma patients except: (correct: A)

Primary survey = ABCDE (Airway, Breathing, Circulation, Disability, Exposure) — rapid life-threat threats first.

- A) *Plain abdomen X-ray*
  Correct EXCEPT. Plain AXR is **secondary survey** or adjunct; not primary survey.
- B) *CXR* – True, for breathing/circulation (pneumo/hemothorax).
- C) *FAST* – True, circulation (hemoperitoneum).
- D) *Pelvic X-ray* – True, circulation (pelvic bleed).
- E) *Cervical spine* – True, disability/exposure (C-spine injury).

Mnemonic: Primary survey imaging is "trauma series": CXR, pelvic X-ray, C-spine (or now CT C-spine). FAST is bedside.

General rotation

77. **Noradrenaline will be most useful in which form of shock?**

A) Obstructive
B) Is contraindicated in shock
C) distributive
D) Metabolic
E) Cardiogenic

ANSWER : C

78. All of the followings are within the spermatic cord in the inguinal canal except:

A) Testicular artery
B) Genital branch of genitofemoral nerve
C) Artery to the vas
D) Lymphatics
E) Inferior epigastric artery

ANSWER : E

Norepinephrine = potent vasopressor, ↑SVR, good for vasodilation.

- C) *Distributive*
  Correct. First-line in septic shock (distributive).
- A) *Obstructive* – False, treat cause (e.g., pericardiocentesis).
- B) *Is contraindicated in shock* – False, it is used.
- D) *Metabolic* – Not a shock type.
- E) *Cardiogenic* – Norepi can be used but not first-line (dobutamine preferred for inotropy).

Tip: Distributive shock = low SVR (septic, anaphylaxis, neurogenic). Use norepi.

Q78 – Contents of spermatic cord

Question: All of the followings are within the spermatic cord in the inguinal canal except: (correct: E)

Spermatic cord contents: 3 arteries (testicular, artery to vas deferens, cremasteric), 3 veins (pampiniform plexus), 3 nerves (genitofemoral, ilioinguinal, sympathetic), 3 fascia layers, vas deferens, lymphatics.

- A) *Testicular artery* – True.
- B) *Genital branch of genitofemoral nerve* – True.
- C) *Artery to the vas* – True.
- D) *Lymphatics* – True.
- E) *Inferior epigastric artery*
  Correct EXCEPT. Runs **posterior** to cord, forms boundary for direct vs indirect hernia.

Exam tip: Inferior epigastric = landmark for hernia type.

79. One of the following is true about inguinal hernia

A) More common in females
B) Reducible hernia is a high-risk factor for strangulation
C) Testicular atrophy is a known postoperative complication
D) Can't be performed as a day-case setting
E) Is a clean-contaminated operation

ANSWER : C&E

Q79 – Inguinal hernia facts

Question: One of the following is true about inguinal hernia (correct: C&E)

- C) *Testicular atrophy is a known postoperative complication*
  True. Vascular injury during surgery.
- E) *Is a clean-contaminated operation*
  True? Wait, standard is clean, but if mesh/prosthetic → clean-contaminated in some classifications.

Others false: A) More common in males; B) Irreducible increases strangulation risk; D) Can be day-case.

Note: Accept as true per paper.

Q80 – Clostridium difficile colitis

Question: All are correct about Clostridium Difficile colitis except: (correct: C)

C. diff = pseudomembranous colitis from antibiotic disruption of gut flora.

- A) *Most likely affect elderly patients with co-morbidities* – True.
- B) *Cephalosporin-based antibiotic is a risk factor* – True (esp. 3rd gen).
- D) *Oral but not intravenous vancomycin is of help* – True, oral for gut lumen.
- E) *Diagnosed by flexible sigmoidoscopy* – True, pseudomembranes seen.
- C) *Surgery is the first line of management*
  False. Medical first (stop abx, oral vanco/fidaxomicin); surgery (colectomy) for fulminant/toxic megacolon.

80. All are correct about Clostridium Difficile colitis except:

A) Most likely affect elderly patients with co-morbidities
B) The use of a cephalosporin-based antibiotic is a risk factor
C) Surgery is the first line of management
D) Oral but not intravenous vancomycin is of help in this situation
E) Can be diagnosed by performing flexible sigmoidoscopy

ANSWER : C

General rotation

81. False about hypernatremia?

A) cannot use NL saline if the patient has hypovolemia
B) associated with inadequate water intake
C) Should not be corrected greater than 0.5mmol/L/hr
D) clinically manifest primarily by neurological effects
E) if hypervolemia is present use furosemide

ANSWER : A

Q81 – Hypernatremia

Question: False about hypernatremia? (correct: A) General-surgery-P.P-by-M

Hypernatremia = ↑ serum Na >145, usually free water deficit.

- A) *Cannot use NL saline if the patient has hypovolemia*
  False → correct answer. **NS is used first** for hypovolemic hypernatremia to restore volume; then hypotonic fluids. General-surgery-P.P-by-M
- B) *Associated with inadequate water intake* – True. General-surgery-P.P-by-M
- C) *Should not be corrected >0.5mmol/L/hr* – True, slow correction to avoid cerebral edema. General-surgery-P.P-by-M
- D) *Clinically manifest primarily by neurological effects* – True (confusion, seizures). General-surgery-P.P-by-M
- E) *If hypervolemia present use furosemide* – True, loop diuretic + water replacement. General-surgery-P.P-by-M

82. Who should receive blood transfusion?

A) A patient with with Hb 8 with tachycardia and SOB
B) A patient with with HB 10 and CAD
C) A patient on hemodialysis and Hb 7
D) A patient with 1 g\dL drop in Hb after bleeding

ANSWER : A

Q82 – Blood transfusion indication

Question: Who should receive blood transfusion? (correct: A) General-surgery-P.P-by-M

No fixed Hb threshold; consider symptoms + comorbidities.

- A) *Hb 8 with tachycardia and SOB*
  Correct. Symptomatic anemia. General-surgery-P.P-by-M

Others: B) Hb10 CAD usually observe; C) HD Hb7 often transfuse but symptoms key; D) 1g/dL drop alone not indication.

83. Which of the following is an indication for FFP?

A) volume repletion
B) reversal of bleeding due to clopidogrel
C) A patient who received 1 PRBC
D) A patient who is on warfarin with a high INR

ANSWER : D

Q83 – FFP indication

Question: Indication for FFP? (correct: D) General-surgery-P.P-by-M

FFP for coagulopathy with multiple factor deficiency.

- D) *Patient on warfarin with high INR*
  Correct. Reverses warfarin. General-surgery-P.P-by-M

Not for volume (crystalloid), clopidogrel (platelets), or single PRBC.

Q84 – Trauma metabolic response

Question: All can present in acute trauma patient except: (correct: A) General-surgery-P.P-by-M

Trauma → catabolic/hypermetabolic: lipolysis, hypercatabolism, gluconeogenesis.

- A) *Hypoglycemia*
  False. Expect hyperglycemia from stress hormones. General-surgery-P.P-by-M

84. All of the following can present in an acute trauma patient except:

A) hypoglycemia
B) lipolysis.
C) hypercatabolism
D) gluconeogenesis.

ANSWER : A

General rotation

85. A patient presenting to the ER after an RTA. He is conscious and communicative. He was found to be hypotensive and is complaining of abdominal pain. What is the best next step?

A) Jaw thrust
B) chin lift
C) intubation
D) IV line
E) emergent laparotomy

ANSWER : D

86. A patient was being treated for lower leg ulcer with a cephalosporin. He developed diarrhea and tested positive for C.diff with the stool toxin test. Best next step?

A) Switch to oral vancomycin
B) start metronidazole therapy

ANSWER : A

Q86 – C. diff treatment

Question: C. diff diarrhea after cephalosporin. Best next step? (correct: A) General-surgery-P.P-by-M

- A) *Switch to oral vancomycin*
  Correct. First-line for non-severe; stop offending abx. General-surgery-P.P-by-M

Metronidazole for mild, but vanco preferred now.

Q87 – Perioperative mortality risk

Question: Highest perioperative mortality? (correct: C) General-surgery-P.P-by-M

- C) *CHF with Hb 7*
  Correct. Anemia + heart failure = high risk. General-surgery-P.P-by-M

MI 4mo ago low risk; aortic stenosis risky but less than symptomatic anemia + CHF.

87. Which of the following is associated with the highest perioperative mortality?

A) MI 4 months ago
B) Aortic stenosis
C) CHF with Hb 7
D) Frequent PVCs
E) Age more than 70

ANSWER : C*

88. A patient had epidural anesthesia for a lower abdominal surgery, she has headache after the procedure, which of the following is not done to decrease the headache?

A) bed rest
B) analgesics
C) decrease caffeine intake
D) epidural blood patch
E) oral hydration

ANSWER : C

General rotation

89. Which of the following is false about hypercalcemia:

A) breast cancer metastasis is an unusual cause
B) severely hypercalcemic patient will have signs of extracellular fluid volume deficit
C) Volume repletion would result in increased urinary excretion of calcium
D) Hypercalcemic patients will have signs and symptoms similar to hyperglycemia

ANSWER : A

Q89 – Hypercalcemia

Question: False about hypercalcemia: (correct: A) General-surgery-P.P-by-M

- A) *Breast cancer metastasis is an unusual cause*
  False. Common cause (bone mets). General-surgery-P.P-by-M

Others true: dehydration common, volume expands → calciuresis, symptoms like weakness/polyuria.

Q90 – Cardiogenic shock drugs

Question: Not given in cardiogenic shock: (correct: A) General-surgery-P.P-by-M

Cardiogenic = pump failure, high SVR.

- A) *Nitroprusside*
  Correct. Vasodilator worsens hypotension. General-surgery-P.P-by-M

Norepinephrine ok for BP support.

90. Not given in cardiogenic shock: (both could be given according to the internet)

A) nitroprusside
B) norepinephrine

ANSWER : A

91. Drug of choice for hydatid cyst:

A) Mebendazole
B) Ketoconazole
C) Albendazole

ANSWER : C

Q91 – Hydatid cyst treatment

Question: Drug of choice for hydatid cyst: (correct: C) General-surgery-P.P-by-M

Hydatid = Echinococcus granulosus cyst (liver/lung most common).

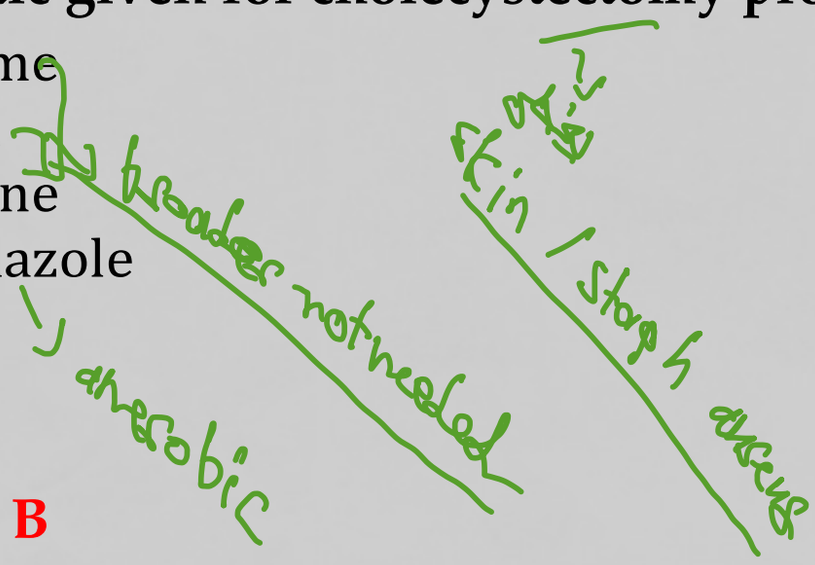
- C) *Albendazole*
  Correct. First-line medical therapy; kills protoscolices, used pre/post-op. General-surgery-P.P-by-M

Mebendazole less effective; ketoconazole antifungal, not antihelminthic.

Tip: Surgery (cystectomy) + albendazole perioperatively for complicated cysts.

92. Antibiotic given for cholecystectomy prophylaxis:

A) Cefuroxime
B) Cefazolin
C) Ceftriaxone
D) Metronidazole



ANSWER : B

General rotation

93. Wrong about femoral canal:

A) Inguinal ligament is the superior border of femoral canal
B) Pectinular line posterioly to femoral canal
C) Contains lymph Nodes
D) lacunar ligament is the lateral border

ANSWER : D

94. All of following considered distributive shock except:

A) anaphylactic
B) hemorrhagic
C) septic

ANSWER : B

95. Unlikely injured site to cause hypovolemic shock:

A) Intracranial
B) Spleen

ANSWER : A

96. About hernias what is true:

A) Strangulation mortality is above 10%
B) Indirect hernia are 20% of inguinal hernia
C) Females have femoral hernia more than inguinal hernia
D) Are second to adhesions as a cause of intestinal obstruction

ANSWER : D

General rotation

97. Sepsis with organ failure and persistent hypotension is the definition of:

A) Septic shock
B) SIRS
C) Severe sepsis
D) MODS

ANSWER : A

98. Antibiotic prophylaxis for inguinal hernia repair with mesh:

A) Vancomycin
B) 1st generation cephalosporin (cefazolin)
C) 2nd generation cephalosporin
D) 3rd generation cephalosporin

ANSWER : B

99. Not part of the SIRS criteria:

A) Temperature < 36
B) HR >90
C) WBC > 12000 or < 4000
D) RR>8 or PaCO2 >23mmHg
E) Cell bands > 10%

ANSWER : D

100. all are risk factors for C. difficile infection except:

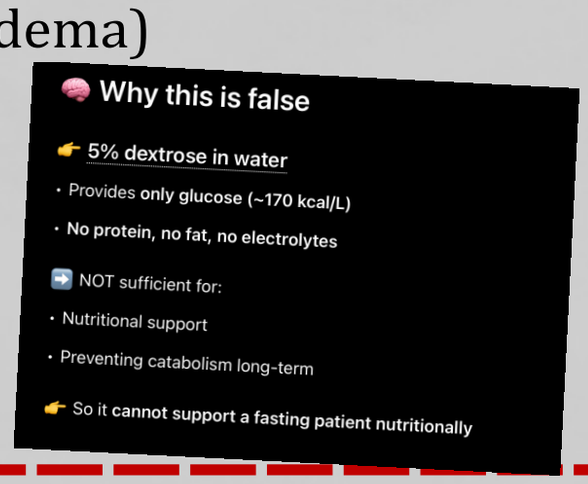
A) smoking
B) PPI
C) Prolonged broad-spectrum antibiotics use
D) Severely ill patient

ANSWER : A

General rotation

101. False about IV fluids :

A) NaCL has 154 mEq Na & 154 mEq Cl
B) RL is the most physiological
C) hypotonic fluids can increase intracerebral pressure (or edema)
D) colloids can cause volume overload
E) G5W is enough to support nutrition for a fasting patient



ANSWER : E

102. All are absolute contraindications to insert NGT except:

A) confirmed esophageal rupture
B) suspected esophageal rupture
C) esophageal stricture (Most likely)
D) foreign body in esophagus

Q101 – IV fluids facts

Question: False about IV fluids: (correct: E) General-surgery-P.P-by-M

- E) *G5W is enough to support nutrition for a fasting patient*
  False. D5W = 5% dextrose = ~100g glucose/day max; inadequate calories/protein. General-surgery-P.P-by-M

NS=154 Na/Cl; RL physiological; hypotonic ↑ICP risk; colloids overload risk.

Q102 – NGT contraindications

Question: Absolute contraindications to insert NGT except: (correct: C) General-surgery-P.P-by-M

Absolute: esophageal rupture, varices, recent alkali ingestion.

- C) *Esophageal stricture*
  Relative; can pass with care. General-surgery-P.P-by-M

Q103 – Pseudomembranous colitis Rx

Question: Treatment except: (correct: C) General-surgery-P.P-by-M

- C) *Steroids*
  Contraindicated (immunosuppresses). General-surgery-P.P-by-M

Metro/vanco, stop offending abx.

ANSWER : C

103. All given for treatment of pseudo membranous colitis except:

A) metronidazole
B) vancomycin
C) steroids
D) stop offending antibiotic

ANSWER : C

104. All risk factors for c.difficle infections except:

A) vegetarian
B) long course of antibiotics

ANSWER : A

General rotation

105. Source of infection after inguinal hernia repair is:

A) Patient's skin
B) instruments
C) surgeon

ANSWER : A

106. High velocity penetrating trauma, transverse abdomen at mid umbilicus, which is likely to be injured:

A) small bowel
B) liver
C) kidney
D) spleen

ANSWER : A

107. False about hypermagnesemia:

A) associated with ECG changes consistent with hyperkalemia
B) Deep tendon reflexes are exaggerated
C) Levels are parallel with potassium levels

ANSWER : B

Midline transverse = small bowel most common (long, intraperitoneal).

- A) *Small bowel*
  Correct. General-surgery-P.P-by-M

Liver/spleen lateral; kidney posterior.

Q107 – Hypermagnesemia

Question: False about hypermagnesemia: (correct: B) General-surgery-P.P-by-M

- B) *Deep tendon reflexes are exaggerated*
  False. **Absent/decreased** DTRs classic. General-surgery-P.P-by-M

ECG like hyperK; levels track K.

Q108 – Erysipelas

Question: About erysipelas, all true except: (correct: C) General-surgery-P.P-by-M

Erysipelas = superficial cellulitis, Group A Strep, raised erythematous border.

- C) *Red, flat, skin lesions*
  False. **Raised**, sharply demarcated. General-surgery-P.P-by-M

Painful, face common, penicillin Rx.

Q109 – Trauma resuscitation

Question: Multiple fractures + hypovolemic shock, initial resuscitation: (correct: D) General-surgery-P.P-by-M

ATLS: Crystalloids first (20ml/kg bolus).

- D) *Ringer's lactate*
  Correct. General-surgery-P.P-by-M

Blood after if ongoing bleed.

108. About erysipelas, all are true except:

A) caused by group A Strep
B) Painful
C) Red, flat, skin lesions
D) Face is common site
E) Treated with penicillin

ANSWER : C

General rotation

109. A patient with multiple fractures and hypovolemic shock, what is the initial resuscitation?

A) Blood
B) FFP
C) Hypertonic saline
D) Ringer's lactate

ANSWER : D

110. All are risk factors of wound infection except:

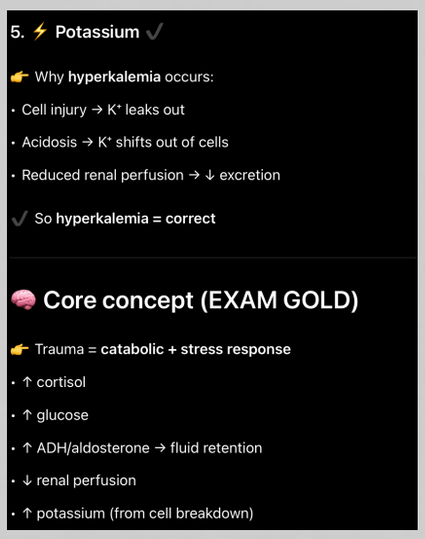
A) DM
B) Immunosuppression
C) Vit C def
D) Young age

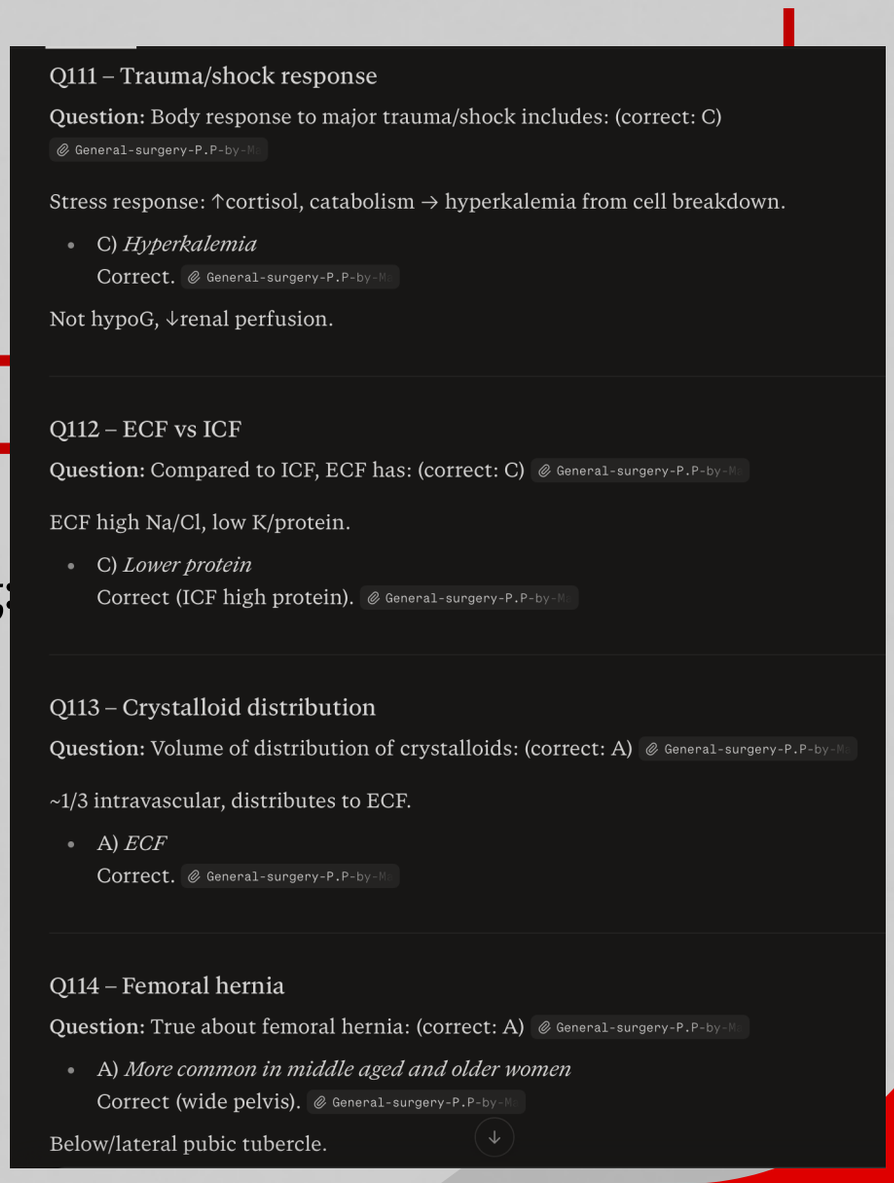
ANSWER : D

111. Body response to major trauma/ shock includes one of the following:

A) Increased Na and water secretion
B) Increased renal perfusion
C) Hyperkalemia
D) Hypoglycemia
E) Decreased cortisol production

ANSWER : C





112. Compared to ICF, the ECF has one of the following:

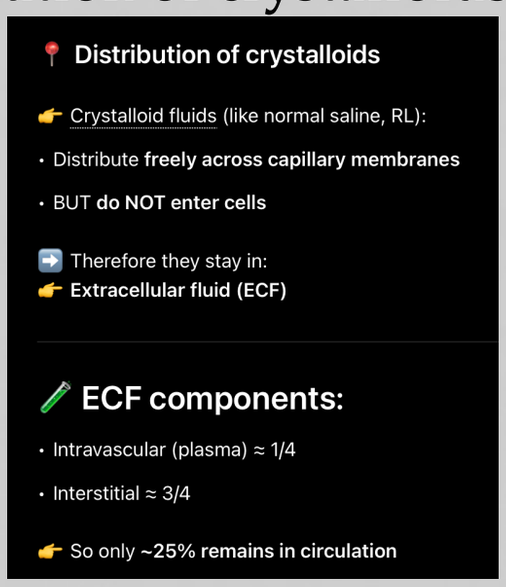
A) Lower Cl-
B) Higher K+
C) Lower protein
D) Lower Ph
E) Bigger in volume

ANSWER : C

General rotation

113. What is the volume of distribution of crystalloids?

A) ECF
B) ICF
C) Transcellular fluid



ANSWER : A

114. Which of the following is true about femoral hernia?

A) More common in middle aged and older women
B) Can be above and medial to the inguinal ligament

below lateral

ANSWER : A

115. After a CVA, an elective surgery must be delayed for how long?

A) 7 days
B) 6 weeks (for MI)
C) 3 months
D) 6 months
E) 1 year

ANSWER : D

116. At which day post-op will the protein start to be metabolized?

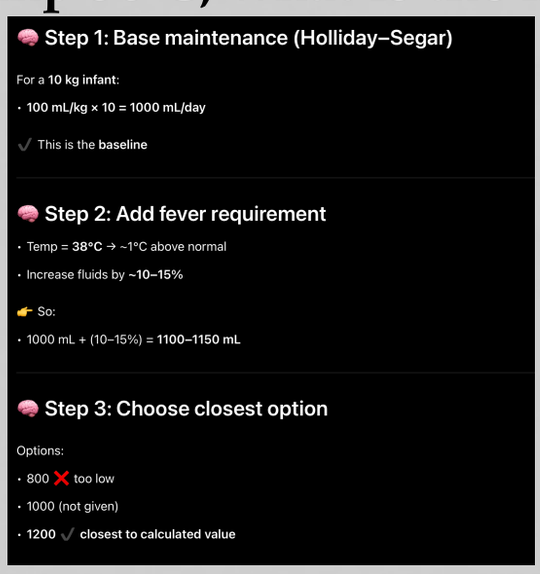
A) 5
B) 7
C) 10
D) 13
E) 15

ANSWER : B

General rotation

117. 10 Kgs infant, 11 months old, temp 38 C, what is the maintenance fluid per day?

A) 300 ml
B) 500 ml
C) 800 ml
D) 1200 ml
E) 1500 ml



ANSWER : D

118. All of the following statements regarding the use of systemic prophylactic antibiotics are true, EXCEPT:

A) The goal is to attain high tissue level at time of incision.
B) Should be as broad-spectrum as possible in most cases.
C) Are usually given as a single dose.
D) They are not effective if given 3 hours after making the incision.
E) Are not effective in reducing postoperative respiratory infections.

ANSWER : B

119. All of the following statements about surgical site infections (SSIs) are true, EXCEPT:

A) Infection in the musculofascial tissues is known as deep SSI.
B) The patient may have systemic signs in a minor SSI.
C) Infection causing delay in hospital discharge is a major SSI.
D) The differentiation between major and minor SSIs is extremely important.
E) Surveillance for surgical site infection should be done for a year after implanted joint surgery.

ANSWER : B

120. tetanus, all of the following statements are true, EXCEPT:

A) The majority of cases are due to endogenous infection.
B) It is caused by gram negative anaerobic bacilli.
C) Tetanolysin is the most important neurotoxin responsible for the disease
D) The disease is characterized by episodes of convulsions with short period of muscle relaxation in between.
E) Penicillin and metronidazole are used to treat an established infection.

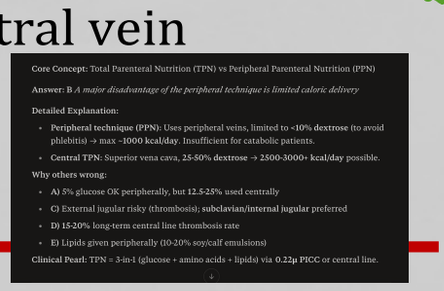
ANSWER : B

General rotation

121. Which of the following statement concerning intravenous nutritional support is TRUE?

A) Concentrations of glucose no higher than 5% should be used to avoid peripheral vein sclerosis
B) A major disadvantage of the peripheral technique is limited caloric delivery
C) If total parenteral nutrition is required, access to the superior vena cava via the external jugular vein is the most suitable site
D) Venous thrombosis is an uncommon complication for long-term central vein catheterization
E) amino acid solutions should only be administered centrally

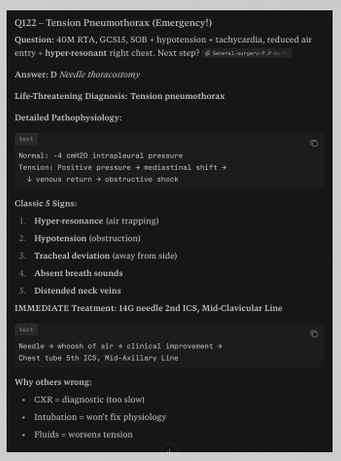
ANSWER : B



122. A 40 year old male patient involved in a road traffic accident, at the accident and emergency department his Glasgow coma scale was 15, but he had shortness of breath, hypotension with tachycardia. He had a patent airway with difficulty in breathing. The air entry was reduced and hyper- resonant on the right side of the chest. The most appropriate next step is:

A) Urgent chest x ray
B) IV access and blood transfusion
C) Intubation and ventilation
D) Needle thoracostomy
E) Diagnostic peritoneal lavage

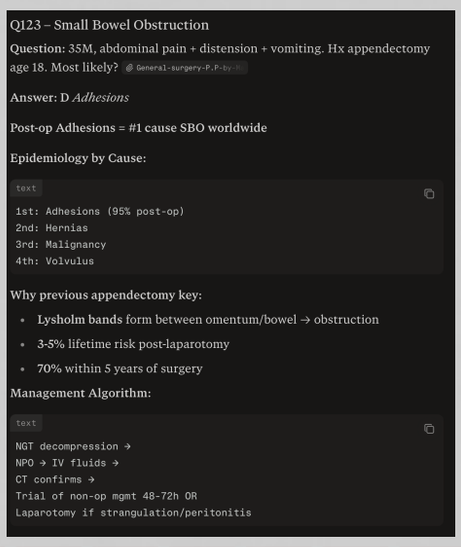
ANSWER : D



123. A 35 year old male patient, admitted with abdominal pain, distension and excessive vomiting. He had previous history of appendectomy at the age of 18. The most likely cause for this illness is:

A) Internal hernia
B) Right colon cancer
C) Volvulus
D) Adhesions
E) Acute mesenteric ischaemia

ANSWER : D



124. All of the following is correct about Femoral hernia EXCEPT:

A) More common in women
B) The risk of strangulation is more as compared with inguinal hernia
C) It present as a swelling below and medial to Pubic tubercle
D) The sac may contain omentum
E) Can be a cause of small bowel obstruction

ANSWER : C

General rotation

125. Concerning postoperative atelectasis, all of the following statements are true EXCEPT:

A) This is the most common cause of postoperative fever that starts on postoperative day four.
B) The physical examination may demonstrate dullness to percussion over the involved area and diminished or absent breath sounds.
C) The most common cause of postoperative atelectasis is bronchial obstruction by plugs of tenacious sputum.
D) Postoperative atelectasis is best managed by standard chest physiotherapy, deep breathing, coughing, and suctioning of patients who are intubated.
E) Judicious use of postoperative analgesia is an essential adjunct permitting patients to breathe deeply, cough forcefully and participate in chest physiotherapy

ANSWER : A

126. Re-feeding syndrome is characterized by which of the following electrolyte abnormalities?

A) Hyponatremia, hypokalemia, hypercalcemia
B) Hyperphosphatemia, hypokalemia, hypocalcemia
C) Hypokalemia, hypomagnesemia, hypophosphatemia
D) Hypocalcemia, hyponatremia, hypomagnesemia
E) Hyperglycemia, hyperkalemia, hyperphophatemia

ANSWER : C

127. How many kilocalories per gram are contained in the glucose used in parenteral formulas?

A) 4.0
B) 5.5
C) 9.0
D) 10.0
E) 11.9

ANSWER : A

128. A child who was involved in a road traffic accident has a bleeding open femur fracture. What is the first step in fluid resuscitation in the emergency room?

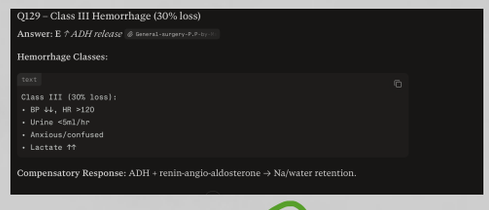
A) Bolus 10ml/kg of normal saline
B) Bolus 20ml/kg of normal saline
C) Bolus 20ml/kg of colloid
D) Transfuse 20ml/kg of packed red blood cells
E) Transfuse 20ml/kg of packed red blood cells, fresh frozen plasma, and platelets

ANSWER : B

General rotation

129. A loss of 30% of blood volume in a 70kg man results in:

A) few initial symptoms
B) slight decrease in hematocrit
C) increased capillary hydrostatic pressure
D) decrease in venomotor tone
E) increased release of anti-diuretic hormone (ADH)



ANSWER : E

130. All of the following are signs of hypovolemic shock EXCEPT:

A) Skin vasoconstriction
B) Confusion
C) Tachycardia
D) Distended neck veins
E) Tachypnea

ANSWER : D

131. All of the following are considered early postoperative complications EXCEPT:

A) Fever
B) Urinary Tract Infection
C) Wound Infection
D) Deep Venous Thrombosis
E) Incisional hernia

ANSWER : E

132. All of the following options are correct regarding major lower limb amputation EXCEPT:

A) Energy expenditure to achieve mobility is lower following above knee amputation compared to below knee amputation
B) Patient outcome is worse following emergency amputation than elective amputation
C) Amputations performed by specialist surgeons have improved outcomes
D) Compared to the general population, patients with diabetes are at higher risk of major amputations
E) Deep vein thrombosis is a recognized risk following major amputation

ANSWER : A

General rotation

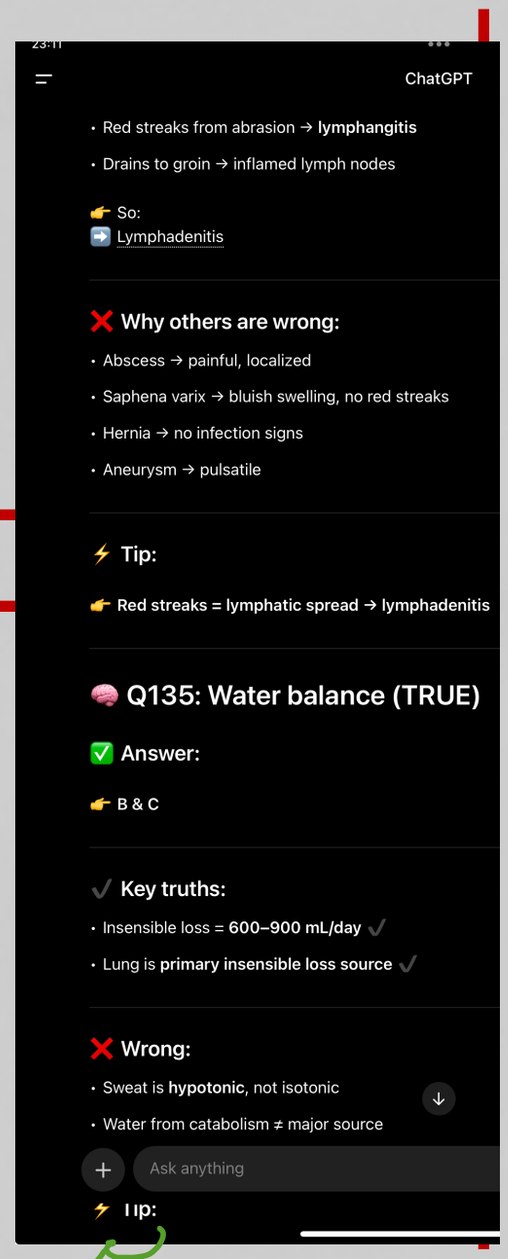
133. **Complications of massive blood transfusion include all of the following EXCEPT**

A) Hypothermia
B) Thrombocytopenia
C) Hyperkalaemia
D) Hypercalcaemia
E) Metabolic acidosis

ANSWER : D

134. **32-year-old male is noted to have painless swelling on the left groin, and red streaks are noted on the thigh coming from an abrasion, which of the following is the diagnosis?**

A) abscess
B) Lymphadenitis
C) Saphena varix
D) Incarcerated inguinal hernia
E) Femoral artery aneurysm



ANSWER : B

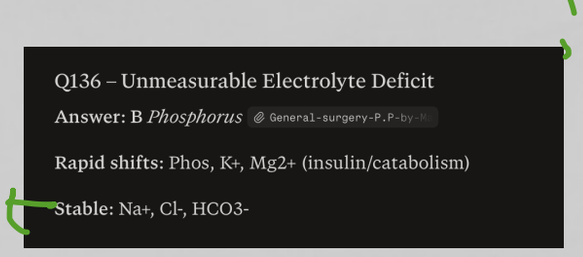
135. **Which of the following is true about normal water balance?**

A) excessive catabolic activity leads to more extracellular water loss
B) the total insensible water loss is between 600-900 ml
C) the lung is the primary source of water insensible loss
D) Sweat is isotonic
E) The water from catabolism is secreted as low as 300 ml in urine

ANSWER : B&C

136. **Deficits in which of the following can't be measured due to rapid and unpredictable shifts?**

A) Bicarb
B) Phosphorus
C) Calcium
D) Chloride
E) Sodium



ANSWER : B

General rotation

137. Which of the following is true about water balance?

A) Intravascular volume 1/3 body fluid
B) Muscles have less water content than fat
C) Women have more percentage of body water than men
D) Mg is the major cation in interstitial compartment
E) K is the major intracellular cation

ANSWER : E

138. A 23-year-old patient fractured his humeral shaft, he was unable to dorsiflex his wrist, which of the following nerves is affected?

A) Radial
B) Median
C) Ulnar
D) Musculocutaneous
E) Deltopectoral

ANSWER : A

139. All are advantages of laparoscopic over laparotomy except:

A) Less post-op pain
B) Less peri-op bleeding
C) Less hospital stay
D) Better vision
E) Less cost

ANSWER : E

140. In an inguinal hernia repair, which of the following prophylactic antibiotics is given?

A) First gen cephalosporins
B) Second gen cephalosporins
C) Third gen cephalosporin
D) Oral vancomycin

ANSWER : A

General rotation

141. A patient has done exploratory laparotomy presented one day postoperatively with low grade fever, after a full assessment, what's the next step:

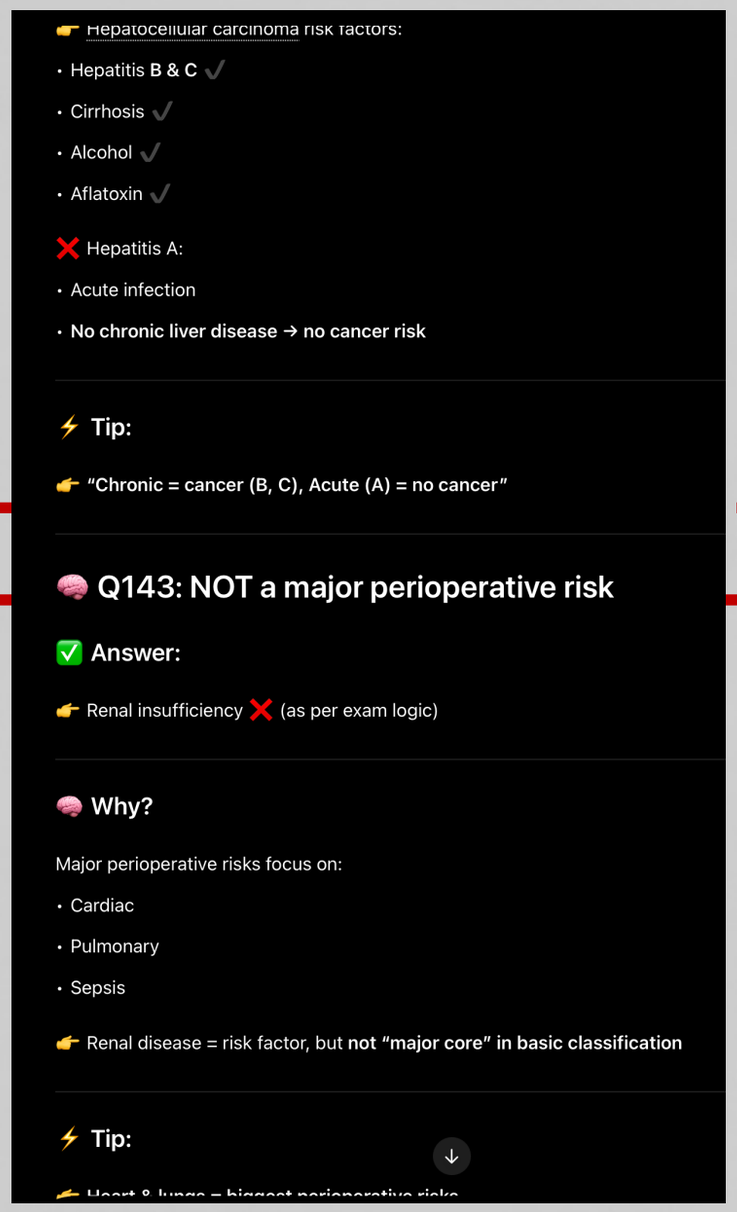
A) IV antibiotics
B) antipyretics
C) CT
D) chest physiotherapy
E) Conservative management

atelactisis

ANSWER : D

142. Not a risk factor for HCC:

ANSWER : Hepatitis A

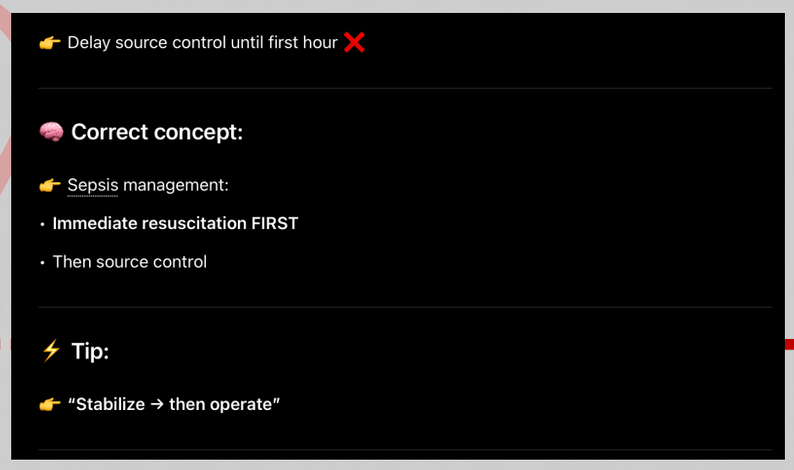


143. Not a major element of perioperative risk:

ANSWER : Renal insufficiency

144. Not to do in sepsis?

ANSWER : Infection source control During 1st hour, stabilize the patient first



What are they?

- SBP > 90
- MAP > 65
- CVP 8 - 12
- U/o > 0.5 ml/kg/hr
- Lactate < 1
- ScvO2 >70
- HCt > 30

Source Control

a specific anatomic diagnosis of infection requiring emergent source control to be identified or excluded as rapidly as possible and that any required source control intervention be implemented as soon as medically and logistically practical after the diagnosis is made.

General rotation

145. Wrong about fluids:

ANSWER : 130mml/L of Cl in ringer lactate

146. Regarding wounds Which is true?

ANSWER : Diverticulitis stage 2 is considered a contaminated wound

🧠 Q146: Wounds (TRUE)

✅ Answer:

👉 Diverticulitis stage 2 = contaminated ✓

🧠 Concept:

Wound classification:

Class	Example
Clean	No entry
Clean-contaminated	Controlled GI entry
Contaminated	Inflammation/spillage
Dirty	Perforation/infection

⚡ Tip:

👉 Inflammation without perforation = contaminated

147. 1st in hemostasis

ANSWER : Vasoconstriction

148. Vit. C.

ANSWER : Hydroxyaltion of procollagen

General rotation

149. True about abx:

ANSWER : carabapenems have good coverage for gram +ve and anaerobes

150. True about gas gangrene??

ANSWER : pain, crepitus and toxemia

151. True

ANSWER : Canal of Nuck opens in labia majora

152. true about hypovolemic shock?

ANSWER : Increased SVR

General rotation

153. MCC in septic shock?

ANSWER : staph/ pseudomonas/ Ecoli

154. true about septic shock:

ANSWER : persisting hypotension requiring vasopressors to maintain a MAP of 65

155. Management of gastric outlet obstruction with hypochloremic hypokalemic metabolic alkalosis?

ANSWER : 0.9 NS infusion with KCl

156. Which of the following is true about body fluids?

ANSWER : It might be affected by wide range of physiological variation

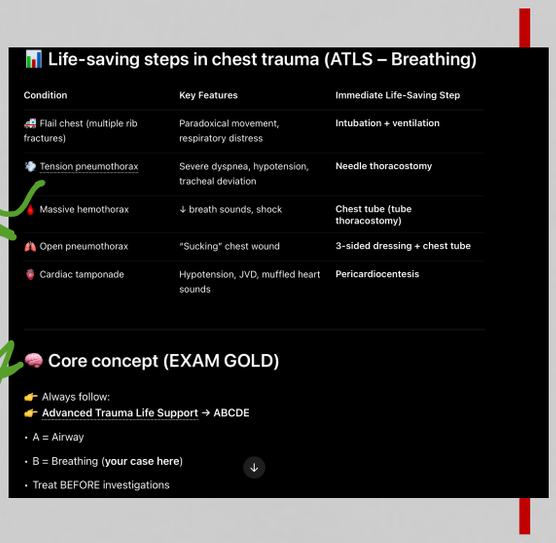
General rotation

157. Which of the following is true about body fluids?

ANSWER : The concentration of sodium in the intravascular and the interstitial compartment is almost equal.

158. Pt with crush injury, in respiratory distress, multiple rib fractures, life saving measure is:

ANSWER : intubation and mechanical ventilation



159. Not complication of TPN:

ANSWER : Hypoglycemia (mentioned in past papers, but both HYPO/HYPER glycemia are possible complications of TPN)

160. Amino acid most important in improving immunity:

ANSWER : glutamine

General rotation

161. Wrong about prophylactic antibiotics?

ANSWER : Given 72 hours post op

162. Which surgery we give systemic antibiotics?

ANSWER : Colon surgery

163. Wrong about fluids of the body?

ANSWER : Intravascular 1/3

164. Most common hernia in females?

ANSWER : Indirect inguinal

General rotation

165. Wrong about femoral hernia?

ANSWER : More common in males

166. SSI, usually occurs when?

ANSWER : 4-5 days post op

167. Early complication post op splenectomy?

ANSWER : Atelectasis

اللهم سلم غزة وأهلها من كل سوء وشر,اللهم انصرهم وثبت أقدامهم وكن لهم ناصرًا ومعينًا

لا تنسوني من صالح دعائكم

Malek Abu Rahma

The End
Good Luck シ