

ORTHO:

AMPUTATIONS:

- 1.)
 - A.) What are the indications of amputation?
 - B.) Describe how an informed consent for a below & above knee amputation can be obtained?
 - C.) Complications of a knee amputation in a 5 year old boy
 - D.) How can the above named complications be prevented?
- 2.)
 - A.) Classify the indications of amputations & give examples in each class.
 - B.) Describe the peri-operative care of a below knee amputation in a diabetic patient
 - C.) What are the complications of amputation stumps?
- 3.)
 - A.) What are the levels of amputation in the lower limb?
 - B.) What are the prognostic factors for osteogenic sarcoma of the proximal tibia?

PELVIS/HIP:

- 1.)
 - A.) 20 year old ran over by a pick up on his pelvis. What is the possible pattern of injuries he is likely to sustain?
 - B.) Outline the initial management of this patient at A&E
- 2.) A restrained 20 year old man, front seat passenger who was involved in a car crash was brought to the A&E complaining of right hip pain and inability to bear weight.
 - A.) What are the possible physical findings of his hip examination?
 - B.) Outline the relevant investigations and their findings
 - C.) What would be the management of this patient?
 - D.) Outline the possible complications
- 3.)
 - A.) Describe the clinical features of a traumatic dislocation of the hip
 - B.) Classify the acetabular fractures that may be associated with a hip dislocation
 - C.) Describe 1 method of closed reduced of posterior dislocation of the hip
 - D.) What is the management of a patient with a traumatic posterior hip dislocation associated with a fracture of the acetabulum?
- 4.) What is the clinical presentation, investigations, management & complications of a 3 year old child with septic arthritis of the hip?
- 5.)
 - A.) Name the causes of pain in the hips of children & adolescents
 - B.) Choose one such cause and outline its management

C.) What are the complications of the condition you have chosen?

6.) What are the clinical presentation, investigations & management of TB arthritis of the hip?

FRACTURES:

1.)

A.) What are the causes of non-union of a fracture?

B.) Discuss the diagnosis and management of a patient with non-union of tibial shaft

2.) Discuss all of the following:

A.) The causes of fractures of the neck of the femur in elderly patients

B.) Classify the fractures of the neck of the femur

C.) Briefly mention the indications for conservative & operative management of the same.

D.) Discuss the complications associated with this fracture.

3.)

A.) List the clinical and radiology features of supra condylar fractures of the humerus

B.) Classify supra condylar fractures of the humerus

C.) Outline the treatment of a one year old boy with a supra condylar fracture of the humerus.

4.)

A.) Give the classification of compound fractures tibia/fibular

B.) Describe the management of a young man who sustained tibio-fibula fracture following a motor cycle accident

C.) Outline the management of a 24 year old matatu driver who presents in casualty with traumatic injury of the leg

5.) A 10 year old girl presents with a pathological fracture of distal femur

A.) What are the differential diagnoses of the causes of the fracture?

B.) Outline the investigations of the condition

C.) Briefly describe the treatment of this girl

D.) List the possible complications

6.) A 9 year old is brought to the casualty department with a swollen elbow a few minutes after fall from a tree. A plain radiology done reveals a supracondylar humerus fractures.

A.) Describe the initial approach to the treatment of this patient

B.) Classify supracondylar humerus fractures in children

C.) Describe the treatment options

D.) State the complications associated with supracondylar humerus fractures

7.) A 6 year old boy fell on an outstretched arm injuring his elbow.

A.) What are the likely injuries to his elbow?

B.) What are the clinical features of a supra condylar of the humerus?

C.) Classify the fracture

- D.) Outline the management and possible complications of this fracture
- 8.) Discuss the management of a 30 year old man with the fracture femur by traction
- 9.) What is Gartland classification of supra condylar fracture of the humerus? What is the clinical presentation, management & complications of this fracture in a 5 year old boy?
- 10.) Discuss the presentation, investigations, Enneking grading & management of osteogenic sarcoma of the distal femur in a 15 year old boy.
- 11.) Discuss the clinical presentation, management & complications of fracture of the neck femur.
- 12.) Define a fracture. Discuss the healing of fractures.
- 13.) How would you manage a 29 year old man with a compound fracture of the tibia following a road traffic accident?
- 14.) A school going boy falls on an outstretched arm while in sports activity:
- A.) What are the injuries likely to present with at A&E?
 - B.) Classify supracondylar fractures of humerus in this boy
 - C.) Describe the non-operative management of Gartland II
 - D.) What are the possible long term complications
- 15.)
- A.) Classify ankle fractures
 - B.) How would you manage ankle fractures?
 - C.) What is a syndesmosis screw in regard to ankle fractures, when is it indicated and when is it removed?
 - D.) State the complications of ankle fractures
- 16.) A man of 40 years is driving in a car & is involved in a RTA fracturing his femur. The fracture is compound.
- A.) What is the initial management of this patient?
 - B.) How would you treat the fracture?
 - C.) What complications would you expect from such a fracture?
- 17.)
- A.) What are the principles of management of fractures?
 - B.) List the clinical signs of a fracture
 - C.) What are the complications of internal fixation of fractures?

OTHER CHILDHOOD CONDITIONS:

- 1.)
- A.) What are the causes of Genu Varum?
 - B.) What are the clinical, radiological & lab features of a child with nutritional rickets?
 - C.) What will be the management of this child?

- 2.)
- A.) Classify physeal injuries in children
 - B.) How would you manage a displaced: Salter Harris II & III & IV of distal tibia? State reason(s) for your choice of method(s).
 - C.) What complications can arise for the above injuries?
 - D.) How can a 6 year old with displaced Salter Harris injury of proximal femur be managed?
- 3.)
- A.) What is the clinical and plain radiological 4 day presentation of a 1 year old baby with septic arthritis of the hip?
 - B.) What other investigations would you suggest be done & their findings.
 - C.) Outline the management of this baby and possible complications
- 4.)
- A.) What is the clinical & plain radiology 3 day presentation of a 3 year old boy with acute osteomyelitis of the proximal tibia?
 - B.) What other investigations would you suggest be done & their findings?
 - C.) Outline the management of this patient and possible complications
- 5.) What is the presentation, investigations and management of a 3 year old child with septic arthritis of the shoulder?
- 6.) A 3 year old presented with a 3 month history of leg discharge, fever, pain & swelling preceded the discharge.
- A.) What are the likely plain radiological features?
 - B.) What are the mechanisms of bone necrosis in this patient?
- 7.)
- A.) List the causes of limping in a child
 - B.) What are the radiological & physical features of Perthe's disease?
 - C.) Describe the management of a child with Perthe's disease
- 8.) A 2 year old female baby was admitted with a 2 day history of a painful knee swelling of the proximal part of her left leg & fever. Knee movements were non tender. The mother denied history of trauma.
- A.) What is the most likely diagnosis?
 - B.) What other signs can be looked for?
 - C.) What investigations can be done & their findings?
 - D.) Describe how this can be managed & possible complications

OTHERS:

- 1.) Write short notes on:
- A.) Planter Fascitis
 - B.) Wrist Drop

- C.) Recurrent shoulder dislocation
- D.) Carpal tunnel syndrome
- E.) Calcaneal spur
- F.) Osgood-Schlatters disease
- G.) Torn medial meniscus
- H.) Birth injuries
- I.) Madura foot
- J.) Recurrent patella dislocation
- K.) Painful heel syndrome
- L.) Hallux valgus
- M.) Ganglion on the dorsum of the wrist
- N.) Volkmans contracture
- O.) Uses of external fixators
- P.) Complications of Colles fractures
- Q.) Causes of generalized knee swellings
- R.) Kocher manoeuvre in closed reduction of anterior shoulder dislocation
- S.) Clinical & radiological features of posterior dislocation of the hip
- T.) Weber classification of ankle fractures
- U.) Trigger finger
- V.) In growing toe nail
- W.) Bone cyst
- X.) Central cord syndrome
- Y.) Syndactyly
- Z.) Bone healing
- AA.) Erb's palsy
- BB.) Reflex sympathetic dystrophy
- CC.) Fracture patella
- DD.) Wrist dislocation

2.) A 25 year old construction worker fell from the 6th floor, landed on his feet. He was unable to stand. At A&E, wound noted on right deformed leg, trachea was deviated from midline & right chest was hyper resonant. BP 80/50 mmHg.

- A.) Describe the initial management of this patient.
- B.) How can the leg injury be classified?
- C.) Describe the management of this patient
- D.) What are the likely complications of the leg injury?

3.) A 4 year old girl presents with fever for 3 days, vomiting & difficulty in moving the lower limb. Examination reveals limited range of movement of hip joint & tender.

- A.) What are the differential diagnoses?
- B.) Outline the management of the above patient most likely diagnosis

4.)

- A.) Define compartment syndrome
- B.) List its causes
- C.) What is the pathophysiology of compartment syndrome?

- D.) Describe the management & complications of compartment syndrome
- 5.) A 15 year old boy presented with a 6 month history of painful hard swelling at the distal part of his left thigh
- A.) What are the most likely lesion & possible radiological features?
 - B.) What other investigations & possible findings would you suggest?
 - C.) Describe the management of this lesion & possible complications
- 6.) A 30 year old motor cycle rider collided with a car. At the A&E the doctor on duty noted a wound on the deformed midsection of right leg.
- A.) What is your diagnosis of this patient's conditions
 - B.) Describe the management of this patient's condition
 - C.) What possible complications can arise from this injury?
- 7.)
- A.) Define compartment syndrome.
 - B.) What are the symptoms, signs, pathophysiology & complications of acute compartment syndrome?
 - C.) How would you manage a completely casted 25 year old man with compartment syndrome of the leg?
- 8.) Discuss the management of a polytrauma patient
- 9.) What are the causes of avascular necrosis of the head of femur? What is the clinical presentation & imaging findings in a 30 year old woman with the problem?
- 10.) Describe the measures to reduce risk of infection in an elective orthopaedic at Kenyatta National Hospital.
- 11.)
- A.) Classify the differential diagnosis of painful shoulder in an adult
 - B.) List the clinical features & investigations of a frozen shoulder
 - C.) Outline the treatment options of frozen shoulder
- 12.) A 60 year old male presented with a 6 month history of progressive back pain & spasticity in the lower limbs. He had no fever and night sweats but had difficulty in micturition and weight loss.
- A.) What other neurological signs can be elicited?
 - B.) What other physical signs will you look for?
 - C.) What investigations would you do & why?
 - D.) List the neoplasm that tend to metastasize to bone
- 13.) A 48 year old insulin dependent woman presented with a 1 week history of foot pain. She has noted a slight discoloration of her left toes.
- A.) What are the likely clinical findings?
 - B.) What is the pathophysiology?

C.) Describe the management of this patient

14.)

- A.) Define acute low back pain
- B.) List the causes of lower back pain
- C.) What are the red flags in back pain?
- D.) What are the possible signs of a 55 year old man with back pain & loss of abdominal reflex & increase tone?
- E.) Describe the investigations that are appropriate in this patient
- F.) What supportive management that can be offered to this patient if he became paraplegic?

15.) In cervical spine injury:

- A.) What are the causes?
- B.) Classify cervical spine injuries
- C.) What are the likely complications of this condition

16.) A 70 year old man presented to the orthopaedic clinic with a 1 month history of progressive weakness of the lower limbs. At the time of presentation, he was unable to walk. As the daughter in law was present, he whispered to the doctor that he had been experiencing difficulty in passing urine for quiet sometime.

- A.) What Qs would you like to ask?
- B.) What physical signs should one look for?
- C.) Describe the investigations you would do to this patient
- D.) What supportive management should this patient be given?

17.)

- A.) Classify diabetic foot
- B.) Describe the clinical & imaging evaluation of a diabetic foot
- C.) Outline the treatment of diabetic foot ulcer

18.) What is the presentation of a 45 year old man with traumatic cord transection at T5? Discuss the supportive management of this patient.

19.) Describe the degrees of nerve injury. How would you manage a patient with a laceration of the radial nerve at the level of the middle of the arm?

20.) A patient presents to a hospital casualty after having been slashed with a knife on the volar aspect of his wrist by robbers.

- A.) What are the possible non bony injuries he could have sustained?
- B.) How would you identify these injuries clinically?
- C.) What are the principles of management of such injuries?

21.) 12 year old known sickler, presenting complain long standing discharging sinus on anterior tibial, following acute illness.

- A.) Describe a clinical staging
- B.) Detailed account of relevant lab and radiological investigations
- C.) Outline management
- D.) Complications

BONE TUMORS:

- 1.)
 - A.) Classify Bone tumors
 - B.) What is the clinical and radiological presentation of osteosarcoma of distal femur in a 15 year old boy?
 - C.) Management of the patient and likely complications?
- 2.) Discuss the management of a 15 year old boy with osteogenic sarcoma of the distal femur.
- 3.) Outline management of a 8 year old girl presenting with Erwing's sarcoma of the radial bone

CLUB FOOT:

- 1.) 2 year old female neonate with club foot brought to ortho clinic.
 - A.) Describe clinical assessment.
 - B.) List the clinical features & commonly applied classification
 - A.) Describe conservative management including sequence of casting
 - B.) What are the possible complications?
- 2.) A 5 day old infant is referred to the orthopedics outpatient clinic with equino-varus deformity in both feet.
 - A.) State the etiological theories of this deformity
 - B.) State the risk factors of this condition
 - C.) Discuss the treatment of this patient
 - D.) State the likely outcome of treatment of this problem

KNEE:

- 1.) A 50 year old man presents in casualty with 5 months history of knee pain & 2 weeks history of knee effusion. He has difficulty using pit latrine. No hotness of body or body weight loss.
 - A.) List 5 predisposing factors of above diseases
 - B.) List the differential diagnosis
 - C.) What are the radiological appearance is expected in this patient case
 - D.) Outline the non-operative management of this patient condition
- 2.)
 - A.) List the causes of knee swelling
 - B.) What is the mechanism of injury?

- C.) What is the clinical presentation of a 25 year old man with a meniscal tear?
- D.) What investigations would you suggest be done & their findings in such patient?
- E.) Outline the management & the possible complications of a meniscal tear in a 25 year old man.

SUFE:

- 1.)
 - A.) Describe the clinical imaging features of a 13 year old boy with a slipped upper femoral epiphysis (SUFE)
 - B.) Outline the treatment of this boy
 - C.) What are the possible complications related to this condition?

TB SPINE:

- 1.)
 - A.) Describe the pathology of TB Spine, outlining the causative organism, origin, dissemination & disease process.
 - B.) What factors may lead to failure of treatment in a patient with confirmed TB of the spine?
 - C.) Outline the supportive management of a patient with TB spine associated with paraplegia.

DDH:

- 1.) Discuss developmental dysplasia of the hip.
 - A.) Describe the anatomy of DDH
 - B.) What are the clinical features of the above mentioned condition in a 12 month old girl?
 - C.) List the investigations necessary in management of DDH
 - D.) Outline treatment of this girl & give possible complications

CHRONIC OSTEOMYELITIS:

- 1.)
 - A.) Describe the clinical features of chronic osteomyelitis
 - B.) Discuss the relevant investigation needed in managing a 16 year old boy suffering from chronic osteomyelitis
 - C.) Outline the treatment of this pathology
 - D.) State the reasons why antibiotic plays a supplementary role in management of chronic osteomyelitis

SURG:

- 1.)
 - A.) Use short notes to discuss the mechanism for the formation of ascites in a patient with liver cirrhosis.

- 2.)
 - A.) Define the term goiter
 - B.) Classify the causes of goiter
 - C.) Describe the pathogenesis. History, clinical presentation & investigation of goiter
 - D.) List the post – operative complications of thyroid surgery

- 3.) A 40 year old lady presents with a 3 day history of upper abdominal pain radiating to the region of the upper, right scapula. The pain was intermittent initially, but has been constant for the past day. On examination she is febrile & has tenderness & guarding in the right upper quadrant. Answer all Qs below:
 - A.) What is the most likely diagnosis & 3 other likely possibilities?
 - B.) What is the clinical sign that is usually associated with the diagnosis and what is the basis for the sign?
 - C.) How would you investigate the patient?
 - D.) What are the initial steps in management?
 - E.) List 4 possible complications of the condition

- 4.) A 20 year old lady was diagnosed to have suffered septic abortion. She was operated and had stormy recovery with leakage of bile contents from the wound. Blood test report, among others showed that she had hypokalemia.
 - A.) What physiological changes would have led to the drop of her serum potassium?
 - B.) What would her serum potassium levels be in mmol/litre?
 - C.) What effect does hypokalemia have on the cardiac activity?
 - D.) What treatment is advised in order to correct the current low serum potassium levels?

- 5.) Write short notes on the following:
 - A.) List the causes of nipple discharge in a 28 year old female
 - B.) Describe in details the investigative methods for this patient
 - C.) Discuss the treatment of this patient
 - D.) What complications will be encountered after the treatment of this patient?

- 6.) Write short notes on the following:
 - A.) Hydatid cyst of the liver
 - B.) Kaposi sarcoma
 - C.) Burkitt's lymphoma
 - D.) Buruli Ulcer

- 7.) A 60 years old man presents with thinning of the urinary stream, hesitancy, urgency & nocturia. Digital rectal examination shows a smooth uniformly enlarged prostate gland.

- A.) Briefly outline the possible causes of his symptomatology
- B.) Outline your investigations in order to prove significant obstruction
- C.) What are the treatment options that you are going to offer this patient?

8.) 27 year old male came into A&E, a motorcycle accident victim (rider). Aphasic, inaudible grunts, opens eyes to pain, abdominal extension. BP 90/30mmHg, pulse 140bpm, SPO2 83%.

- A.) GCS
- B.) Investigations
- C.) 8 causes of secondary brain injury
- D.) Management

9.) 39 year old female at outpatient clinic with presenting complains of a right breast lump. On general exam - normal. The right breast – 6cm lump, RUQ with Peau d’orange.

- A.) What other information you would get from history and physical exam
- B.) Diagnosis
- C.) Next step of management
- D.) Treatment options available
- E.) What would she have done differently to detect it earlier?

PLASTICS:

- 1.) Discuss the management of a 30 year old male patient with 40% burns of the body involving the head & face. Outline the complications this patient may develop immediately & later.
- 2.) A 20 year old man who works in a chemical factory is involved in a fire accident at his work place of work and suffers 1st and 2nd degree facial and chest burn injuries estimated at 20%
 - A.) Discuss the immediate management of the patient at the emergency room
 - B.) Discuss the continuous management of this patient in the ICU
 - C.) Select 2 expected life threatening complications & outline their management
- 3.) A young couple gives birth to a 2.5kg female baby with a complete cleft lip and palate. There is a positive family history of a cleft lip on the mother’s side.
 - A.) What is the embryological basis of this defect?
 - B.) What would you advice this couple about the timing of repair of this defect?
 - C.) List 4 complications of cleft lip surgery
- 4.) 9 year old girl on burn management. Burns on anterior trunk. Now in good general condition. 12% deep partial thickness burns on chest and abdomen. Wounds clean with granulation tissue. Hb 12.6g/dl. Decision is taken to do grafting.
 - A.) Define grafts
 - B.) Classify types of skin grafts
 - C.) Classify potential donor sites
 - D.) Describe process of obtaining grafts

- E.) Complications of grafts
- F.) Reasons for graft failure

CARDIOTHORACIC:

- 1.) A 38 year old, was referred from a peripheral facility to the A&E with a 3 month history of difficulty in swallowing. It started with solid foods & currently he is unable to swallow his own saliva. He appears sick looking & markedly wasted.
 - A.) Define & grade the severity of dysphagia in this patient
 - B.) Give 5 conditions that can present with dysphagia
 - C.) What is the possible diagnosis in this patient & why?
 - D.) What further investigations would you request for & why?
 - E.) How would you initially manage this patient in the A&E?
 - F.) What are the definite management options for cancer of the esophagus?
 - G.) What are some of the common complications after an esophagectomy?

- 2.) Make short notes on the following:
 - A.) What is meant by "Flail Chest"?
 - B.) How does it threaten the life of an injured individual?
 - C.) Briefly highlight management principles of such a patient
 - D.) Acceleration – deceleration injury is one of the major predisposing factors of tear of the thoracic aorta. Briefly discuss the rest of the mechanism injury.