

BLOCK 'P'

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A 45-year-old man with rheumatoid arthritis has been on oral prednisolone 10 mg daily for 4 weeks. He abruptly stops the medication due to symptom improvement. Two days later, he presents with severe fatigue, dizziness, nausea, and hypotension (BP: 88/58 mmHg). He appears lethargic. What is the most appropriate initial management step for this patient?

- a. Administer IV fluids and IV hydrocortisone
- b. Administer IV fluids and administer oral prednisolone
- c. Administer IV fluids and initiate antibiotic therapy
- d. Start vasopressors for hypotension along with hypertonic
- e. Take the blood for random blood sugar, and infuse hypertonics

A 42-year-old female presents to the emergency department with complaints of intermittent muscle spasms, tingling sensations in her fingers and toes, and difficulty swallowing. She has a history of recurrent kidney stones and has been taking high doses of thiazide diuretics for hypertension. On physical examination, you elicit a positive Trousseau's sign. What is the most likely cause of the patient's symptoms?

- a. Hypercalcemia due to excessive vitamin D intake
- b. Hypokalaemia secondary to diuretic use
- c. Hypocalcaemia due to diuretic use
- d. Hypomagnesaemia due to diuretic use
- e. Hyperphosphatemia due to renal failure

A 45-year-old man presents with a 6-month history of excessive thirst, polyuria, and nocturia. Despite an increased fluid intake of over 5 litres per day, he continues to experience dry mouth. His physical examination is unremarkable. Laboratory tests reveal urine osmolality of 150 mOsm/kg and plasma osmolality of 295 mOsm/kg. Serum sodium levels are 142 mmol/L (normal range: 135–145 mmol/L). A water deprivation test shows no significant change in urine osmolality, and administration of desmopressin results in a marginal increase. What is the most likely diagnosis?

- a. Central diabetes insipidus
- b. Nephrogenic diabetes insipidus
- c. Primary polydipsia
- d. Syndrome of inappropriate antidiuretic hormone secretion (SIADH)
- e. Hypercalcemia-induced diuresis

A 52-year-old male patient presents for a routine check-up. He has no significant medical history but reports fatigue and increased thirst over the past few months. Laboratory investigations reveal a fasting blood glucose level of 6.3 mmol/L (113 mg/dL) and an HbA1c of 6.0%. The patient is asymptomatic and shows no signs of retinopathy or neuropathy on examination. Based on these findings, which of the following is the most accurate assessment and management plan?

- a. Advise the patient that he is within normal glycemic limits and schedule annual follow-up appointments.
- b. Diagnose the patient with impaired glycaemia (pre-diabetes) and recommend lifestyle interventions to reduce progression risk.
- c. Confirm a diagnosis of diabetes mellitus and initiate oral hypoglycaemic therapy to prevent microvascular complications.
- d. Inform the patient that he has a negligible risk of developing complications and does not require lifestyle modification.
- e. Refer the patient for further evaluation, including an oral glucose tolerance test (OGTT), for definitive diagnosis.

A 60-year-old male with type 2 diabetes mellitus, hypertension, and stage 3 chronic kidney disease (CKD) is currently treated with metformin and lifestyle modifications. His HbA1c remains elevated at 8.2%. Given his comorbidities, which of the following add-on therapies would be most appropriate to improve glycemic control and provide additional renal benefits?

- a. Dipeptidyl Peptidase-4 (DPP-4) Inhibitors
- b. Glucagon-Like Peptide-1 (GLP-1) Receptor Agonists
- c. Insulin
- d. Sodium-Glucose Co-transporter 2 (SGLT2) Inhibitors
- e. Sulfonylureas

A 35-year-old male presents to the emergency department with a 3-month history of progressively worsening bilateral lower limb oedema, frothy urine, and generalised fatigue. He denies any fever, dysuria, or flank pain. His past medical history includes seasonal allergies and no chronic illnesses. Physical examination reveals significant pitting oedema extending to the knees. Laboratory results are as follows: Urinalysis: 4+ proteinuria, no hematuria, Serum albumin: 2.0 g/dL (Normal: 3.5-5.0 g/dL), Serum creatinine: 2.0 mg/dL (Normal: 0.6-1.2 mg/dL), Total cholesterol: 290 mg/dL (Normal: <200 mg/dL), Blood pressure: 120/78 mmHg. Further imaging shows normal-sized kidneys with no structural abnormalities. Serologic testing for antinuclear antibodies (ANA) and anti-dsDNA is negative. Given the clinical presentation and investigative findings, which of the following is the most likely diagnosis?

- a. Acute Glomerulonephritis
- b. Chronic Kidney Disease with secondary nephrotic features
- c. Diabetic Nephropathy
- d. Minimal Change Disease
- e. Nephrotic Syndrome secondary to membranous nephropathy

A 22 year female presented with milky discharge from breast and amenorrhea for 9 months, she does not take any medications and has normal renal and thyroid function tests. Her serum prolactin level is 75 (increased), and a pituitary MRI reveals 4 mm mass. Her pregnancy test is negative. Which of the following is most consistent with her clinical picture?

- a. Raised estradiol
- b. Suppressed FSH
- c. Low Free T4 and Cortisol
- d. Abnormal visual fields
- e. Raised LH

A 45-year-old male with a 20-year history of smoking and previous episodes of wheezing presents to the emergency department with progressive shortness of breath and fatigue over the past 48 hours. He reports no chest pain, cough, or recent respiratory infections. Physical examination reveals decreased breath sounds bilaterally, prolonged expiration, and use of accessory muscles for breathing. Arterial blood gas (ABG) analysis is as follows: pH: 7.30 (Normal: 7.35-7.45), PCO₂: 60 mmHg (Normal: 35-45 mmHg), HCO₃⁻: 29 mEq/L (Normal: 22-28 mEq/L). Further evaluation shows an oxygen saturation of 88%, on room air. A chest X-ray reveals hyper-inflated lungs with a flattened diaphragm. Given the patient's history, clinical findings, and ABG results, what is the most likely underlying cause of his respiratory acidosis?

- a. Acute pulmonary embolism
- b. Acute severe asthma exacerbation
- c. COPD exacerbation
- d. Central nervous system depression due to drug overdose
- e. Progressive neuromuscular disease

A 55-year-old woman is admitted to the hospital with severe diarrhoea and clinical signs of dehydration. Laboratory results, including an arterial blood gas (ABG) analysis, reveal the following: pH: 7.15 (Normal: 7.35-7.45) PCO₂: 30 mmHg (Normal: 35-45 mmHg), HCO₃⁻: 12 mEq/L (Normal: 22-28 mEq/L). She is diagnosed with metabolic acidosis. The medical team must determine the most appropriate intervention to correct her acidosis and manage her overall condition. Which of the following is the most appropriate management step for this patient?

- a. Administer a carefully calculated infusion of sodium bicarbonate tailored to the patient's base deficit
- b. Begin a bicarbonate infusion using half-isotonic saline combined with potassium chloride for electrolyte repletion
- c. Delay bicarbonate administration and prioritise correcting the underlying cause while ensuring renal function support
- d. Initiate a balanced crystalloid solution such as Ringer's lactate to correct dehydration and partially buffer acidosis
- e. Utilise sodium bicarbonate therapy only with strict monitoring of arterial blood gases and potential development of alkalosis

A 60-year-old male with a history of chronic kidney disease presents to the emergency department with complaints of nausea, vomiting, and lethargy. Laboratory tests reveal: Serum creatinine: 3.5 mg/dL (Normal: 0.6-1.2 mg/dL) Blood urea nitrogen (BUN): 40 mg/dL (Normal: 7-20 mg/dL) Serum potassium: 6.2 mEq/L (Normal: 3.5-5.0 mEq/L), Arterial blood gas (ABG): pH: 7.25, PCO₂: 35 mmHg, HCO₃⁻: 15 mEq/L. Given the patient's clinical presentation and laboratory results, which of the following is the most appropriate management strategy?

- a. Immediate administration of intravenous sodium bicarbonate
- b. Initiation of hemodialysis to remove excess potassium and metabolic acids
- c. Aggressive intravenous fluid resuscitation with normal saline
- d. Oral potassium binders and loop diuretics to lower potassium levels
- e. Administration of calcium gluconate to protect the heart from hyperkalemia

A 70-year-old woman with a known history of heart failure is brought to the emergency department with confusion, lethargy, and muscle weakness. On examination, she appears euvolemic. Her laboratory results are as follows: Serum sodium: 115 mEq/L (Normal: 135-145 mEq/L), Serum osmolality: 260 mOsm/kg (Normal: 275-295 mOsm/kg), Urine sodium: 40 mEq/L. Additional lab tests rule out adrenal insufficiency. The medical team reviews her recent medication history and finds no evidence of diuretics or medications causing fluid shifts. What is the most likely underlying cause of the patient's hyponatremia?

- a. Excessive water intake leading to dilutional hyponatremia
- b. Heart failure-induced secondary hyperaldosteronism
- c. Hypothyroidism-related fluid imbalance
- d. Syndrome of inappropriate antidiuretic hormone secretion (SIADH)
- e. Thiazide diuretic use undetected in medical history

A 25-year-old woman presents with high blood pressure, recurrent hematuria and abdominal pain. Ultrasound of the kidneys reports multiple cysts of varying sizes in both the kidneys. What is the most appropriate initial management?

- a. Antibiotics for suspected infections
- b. Conivaptan
- c. Renal transplant
- d. Start ACE inhibitors
- e. Tolvaptan

A 50-year-old woman presents to the outpatient clinic seeking advice for weight management. She has a body mass index (BMI) of 37.5 kg/m² and a history of ischaemic heart disease for the past 7 years, along with type 2 diabetes mellitus diagnosed 3 years ago. Her current blood pressure is 135/80 mmHg, and she reports walking for 20 minutes daily. Despite her efforts, she struggles with weight loss and glycemic control. Additionally, she is on metformin for diabetes management and lisinopril for blood pressure control. Given her medical history and current health status, which of the following would be the most effective next step in managing her obesity and associated comorbidities?

- a. Bariatric surgery
- b. Comprehensive diet modification under a nutritionist's guidance
- c. Diet control with adjunctive use of orlistat
- d. Initiation of orlistat therapy alone
- e. Implementation of a rigorous exercise regimen combined with diet control

A 60 year female presented with numbness and tingling in her toes and has noted numbness around her mouth when she is stressed. She had thyroid surgery 2 years back and is currently taking thyroxine and calcium supplements daily. On examination she has thyroidectomy scar, her BP is 130/80 mm of Hg. She develops cramping in her forearms when the BP cuff was inflated. Based on her history and examination which of the following laboratory reports you will expect?

- a. Low calcium, raised phosphate and raised PTH
- b. Low calcium, low phosphate and low PTH
- c. Low calcium, raised phosphate and low PTH
- d. Raised calcium, raised PTH and low phosphate
- e. Raised alkaline phosphatase, raised PTH and low calcium

A 50 year old female presented with palpitations, tremors and heat intolerance. Her pulse rate is 120 bpm and she has smooth and tender thyroid gland with no proptosis. There is no family history of thyroid disorders. Her free T4 is 4.9 (raised) and TSH is 0.05 (low). What is the most likely diagnosis?

- a. Toxic Thyroid adenoma
- b. Toxic multi-nodular goitre
- c. Subacute thyroiditis
- d. Grave's disease
- e. Fictitious thyrotoxicosis

A 70-year-old female nursing home resident presents with complaints of persistent bone pain. Her medical history is significant for hypothyroidism, for which she is on thyroxine, and she is also taking phenytoin for seizure management. Her laboratory investigations reveal the following: Serum calcium: 8.2 mg/dL (low), Parathyroid hormone (PTH): 80 pg/mL (elevated), Alkaline phosphatase: 350 IU/L (elevated), Serum phosphate (PO4): 2.1 mg/dL (low). Most likely diagnosis?

- a. Primary hyperparathyroidism
- b. Tertiary hyperparathyroidism
- c. Vitamin D deficiency
- d. Autoimmune hypoparathyroidism
- e. Hypomagnesemia

A 65-year-old male presents to the clinic with complaints of muscle weakness and fatigue. He has a history of chronic kidney disease and is currently on dialysis. His medications include erythropoietin and calcium carbonate. Laboratory tests reveal the following: Serum calcium: 9.0 mg/dL (normal), Serum phosphate: 6.5 mg/dL (elevated), Parathyroid hormone (PTH): 150 pg/mL (elevated), Serum vitamin D: 15 ng/mL (low). Which of the following is the most likely diagnosis?

- a. Primary hyperparathyroidism
- b. Secondary hyperparathyroidism
- c. Osteoporosis
- d. Paget's disease of bone
- e. Vitamin D toxicity

A 30yrs old multipara at 40wks is in labour and experiencing severe pains. Which of the following analgesic options would be most effective for her?

- a. Transcutaneous electrical nerve stimulation
- b. Nitrous Oxide
- c. Epidural Anesthesia
- d. Opioid Analgesia
- e. Non Pharmacological Methods i.e Massage

A 25 years old primigravida at 16 weeks gestation presents with severe nausea and vomiting. Her weight is decreased by 3 kg in the past 2 weeks. Which of the following is the most appropriate management?

- a. Oral anti emetics and rest
- b. Hospital admission for IV Fluids and medications
- c. Terminate Pregnancy
- d. An urgent ultrasound to rule out fetal growth restriction
- e. Give Multi Vitamins and Monitor weight

During pregnancy the heart undergoes structural and functional changes. Which of the following is TRUE regarding these cardiovascular adaptations?

- a. Cardiac output decreases in the first trimester and increases in the third trimester
- b. The heart shifts superiorly and to the left due to enlarging uterus
- c. Systemic vascular resistance increases due to elevated progesterone levels
- d. Plasma volume decreases leading to physiological anemia of pregnancy
- e. The enlarging uterus during pregnancy has no effect on heart

A 35 yrs old woman, G3P2 with 38weeks of gestation is admitted to the labor ward with history of previous 1 c/section, in active labour with cervical dilatation of 6 cm. The fetal heart rate tracing shows late decelerations. What would be the most appropriate management option?

- a. Emergency C/section
- b. NVD with episiotomy
- c. Vaccum vaginal delivery
- d. Forceps vaginal delivery
- e. Spontaneous vaginal delivery

Which of the following is the most appropriate management approach for a pregnant women with a mechanical heart valve?

- a. Warfarin throughout pregnancy
- b. Heparin during 1st trimester then switch to warfarin until 36weeks
- c. Aspirin only
- d. No anti coagulation necessary
- e. Heparin throughout pregnancy

Which of the following is the best predictor of the need for blood transfusion in patient with PPH?

- a. Estimated blood loss > 1000ml
- b. Maternal tachycardia
- c. Maternal hypotension
- d. Decrease hemoglobin level by 3g/dl
- e. Maternal bradycardia

A 34-year-old G4P5 at 39 weeks' gestation came with labor pains. The patient is noted to be 7 cm dilated, and 50% effaced with the fetal forehead and bridge of nose felt. The denominator felt in this position is

- a. Forehead
- b. Nasal bone
- c. Frontal bone
- d. Parietal bone
- e. Chin

A Woman who is 35 weeks pregnant is complaining of painful vulval blisters. She is diagnosed with genital herpes when she was 25 weeks pregnant and received anti viral treatment. She is not willing for caesarean delivery. What is first line of investigation to help her decide mode of delivery?

- a. PCR to confirm infection
- b. Take vulval and vaginal swabs for culture
- c. Test for immunoglobulin to HSV1
- d. TEST for HSV IgG Antibodies to type 2 HSV infection
- e. Test for type specific HSV IgG antibodies to HSV 1 and HSV 2

Which diameter is typically engaged in a vertex presentation with a well-flexed fetal head?

- a. Occipitofrontal b. Suboccipitobregmatic c. Mentovertical d. Submentovertical e. Suboccipitofrontal

Which of the following contributes to both inlet and outlet of female pelvis?

- a. Pubic Symphysis b. Sacral promontory c. Iliopectineal line d. Coccyx e. Ischiopubic ramus

The correct sequence of cardinal movements of labor is;

- a. Engagement, internal rotation, external rotation, and expulsion
b. Internal rotation, descent, flexion, external rotation, and expulsion
c. Engagement, descent, flexion, internal rotation, external rotation, and extension
d. Engagement, descent, flexion, internal rotation, extension, external rotation, and extension
e. Engagement, descent, flexion, internal rotation, extension, restitution, external rotation

Extension of the fetal head occurs during which part of the birth canal?

- a. Pelvic Inlet b. Pelvic outlet c. Pelvic Cavity d. Vaginal canal e. At the level of ischial spine

30 years old woman with a history of well controlled epilepsy is at 8 weeks gestation. She is taking Valproic acid 500 mg twice daily. Her first baby had some neural tube defects. What will be your management option in her current pregnancy?

- a. Continue Valproic Acid and add Folic Acid b. Terminate the pregnancy
c. Switch to a different anti convulsant with consultation of Physician and add Folic Acid
d. Increase the dose of Valproic Acid e. Discontinue Anti Convulsants and give Folic Acid only

A 30 years old Primigravida who delivered a male baby vaginally and placenta not delivered for 30 minutes. What will you do next to deliver placenta?

- a. Manual removal of placenta under GA b. IV Oxytocin c. Misoprostol per rectally
d. Deliver Placenta by CCT e. IM Ergometrine

The physiological changes in the gastrointestinal system during pregnancy can lead to common symptoms. Which of the following change is correct?

- a. Increased gastric motility due to elevated progesterone levels
b. Delayed gastric emptying contributes to nausea and vomiting
c. Increased lower esophageal sphincter tone reducing the risk of gastroesophageal reflux
d. Increased production of hydrochloric acid in stomach e. Decreased production of HCL acid in stomach

28 years old G2P1 at 32 weeks gestation presents with labour pains. On examination she is vitally stable with fetal heart rate of 140/min. The cervix is 3 cm dilated and 60% effaced. What is the most appropriate management option for this patient?

- a. Corticosteroids followed by immediate cesarean delivery b. Emergency Cerclage
c. Give Tocolytics + Corticosteroids d. Deliver the fetus immediately e. Tocolytics Only

Which of the following pregnancy complication is most likely associated with antiphospholipid syndrome ?

- a. Preterm labour b. Recurrent miscarriages c. Gestational diabetes d. Placenta previa e. Placental abruption

A 25 year old lady with sickle cell disease came to visit you for antenatal booking. Which complication is significantly more common in her?

- a. Chest infection b. Intra uterine growth restriction c. Major obstetrical hemorrhage
d. Placental abruption e. Urinary tract infection

Best screening test for GDM is

- a. Oral glucose tolerance test (75 Gms) b. HbA1c c. Fasting blood sugar d. Random blood sugar e. Urine sugar

A PG & came for antenatal check-up. She is 14 weeks pregnant & her fasting blood sugar is 110mg/dl. She is suffering from

- a. Type 1 diabetes b. Type 2 diabetes c. GDM d. Mitochondrial diabetes e. Monogenetic diabetes

A 32-year-old pregnant woman presents for her first prenatal visit. During the obstetric history, she reveals that she had a previous cesarean section for breech presentation with her first child and now presentation of the fetus is cephalic. Her previous surgical notes show extension of tears into upper uterine segment. What is the most appropriate management plan for her current pregnancy?

- a. Plan for a trial of labor after cesarean (TOLAC) b. Schedule an elective repeat cesarean section
c. schedule cesarean section when in active labour d. Induce labor at term to avoid risk of uterine rupture
e. Refer her to a high-risk obstetrician for further evaluation

30-year-old pregnant woman is admitted to the labor ward with contractions every 5 minutes. O/E her cervix is 7 cm dilated, and the fetal heart rate is normal. The midwife begins documenting her progress on the partogram. Two hours later, the cervical dilation has reached 9 cm, and the fetal heart rate remains stable. What does this indicate according to the partogram?

- a. Inadequate progress in labor
- b. Fetal distress
- c. Normal labor progression
- d. Transition phase of labor
- e. Failure to progress

What is the condition where one of the foetuses dies early and the dead foetus is flattened, mummified and compressed between the membranes of the living foetus and the uterine wall?

- a. Foetus papyraceous
- b. Mummified foetus
- c. None of the above
- d. Superfecundation
- e. Superfetation

Gestational age at which monitoring for TTTs should be started

- a. 14 weeks
- b. 16 weeks
- c. 18 weeks
- d. 20 weeks
- e. 22 weeks

Labour care guide has

- a. 5 sections
- b. 6 sections
- c. 7 sections
- d. 8 sections
- e. 9 sections

If a pregnant lady with GDM presents with polyhydramnios & macrosomic baby, the best treatment option will be;

- a. Consult physician
- b. Biguanides
- c. Diet & exercise
- d. Sulphonyl urea
- e. Insulin injections

A 26-year-old pregnant woman at 34 weeks gestation presents with severe hypertension, proteinuria, and signs of impending eclampsia. What is the most appropriate initial management to prevent seizures?

- a. Administer corticosteroids to promote fetal lung matura
- b. Administer magnesium sulfate
- c. Intravenous hydration
- d. Blood pressure control with antihypertensive medication
- e. Immediate delivery of the baby

A 30-year-old pregnant woman at 34 weeks gestation presents with elevated blood pressure, proteinuria, and severe headache. She has no history of hypertension before pregnancy. What is the most likely diagnosis?

- a. Chronic hypertension in pregnancy
- b. Eclampsia
- c. Gestational hypertension
- d. Preeclampsia
- e. Pregnancy induced hypertension

A 06 years old girl is brought to ER with generalized body swelling for 3 days which initially started around the eyes. She was given anti allergic but without any improvement. She has also been complaining of mild headache. There is no associated fever, vomiting or loose stools. Her urine output has decreased and appears dark brown in color which her mother attributes to decrease in fluid intake. She has remained well previously except a mild skin infection two weeks ago. Most likely diagnosis;

- a. Alport syndrome
- b. Acute glomerulonephritis
- c. Bergers disease
- d. Nephrotic syndrome
- e. UTI

A 5 years old child has been brought to ER with severe abdominal pain for 2 days. He was doing well before this episode and was on a regular follow up visits with his pediatrician for some kidney issues. He is regularly taking his medications for the past three weeks or so and is showing good compliance. Pain is not associated with vomiting or fever. He was given paracetamol and ranitidine along with antispasmodics but to no avail. Clinically abdomen is distended and shows diffuse tenderness. Diagnosis?

- a. Gastritis
- b. Peptic ulcer disease
- c. Food poisoning
- d. Spontaneous bacterial peritonitis
- e. UTI

A 2 years old child has been admitted in pediatrics ward after severe episode of vomiting and loose stools for 2 days. There is also associated moderate fever. Stools were initially watery then its consistency changed and contained mucus with blood. His treatment involves iv fluids and ceftriaxone. On 3rd day of admission he got edematous and his urinary output decreased. Clinically he looks pale and toxic. Abdomen is distended, chest is clear. Investigations involving CBC, blood and urine culture and sensitivity, renal function tests have been sent and are pending. What is the most likely diagnosis?

- a. AGN
- b. Acute kidney disease
- c. Hemolytic uremic syndrome
- d. Sepsis
- e. Secondary peritonitis

A 4 years old child has been admitted as a case of hemolytic uremic syndrome. He was vigorously given fluids initially for dehydration but has not responded well. He is looking pale and sick. Investigations show raised urea and creatinine. Serum Na of 134 meq/l (137-142meq/l), serum K 7.5 meq/l (3.5-5.5 meq/l). What is the best treatment approach?

- a. Salbutamol nebulisation
- b. Half strength normal saline (1/2) slow infusion
- c. Insulin with dextrose
- d. Peritoneal dialysis
- e. Fluid restriction

A neonate 25 days old has been brought for a routine visit to OPD. He was born full term, SVD with immediate cry. Clinically he has stable vitals, looks jaundiced with no enlarged liver or spleen. He weighs 3.7 kgs. Mother says that he is quite a happy baby as he hardly cries and perhaps has a natural tendency to sleep most of the time. Laboratory investigations reveal slightly raised bilirubin and a mild degree of anemia. What is the most likely diagnosis?

- a. Congenital hypothyroidism
- b. Gilbert syndrome
- c. Crigler Najar syndrome type 2
- d. ABO incompatibility
- e. Physiological jaundice

A 5 years old child presents to ER in a semicomatosed condition. He had been unwell for the past couple of weeks with worsening polyuria and polydipsia. One day back he developed mild fever and today he got unconscious. His random blood sugar in ER shows a value of 350 mg/dl. An impression of diabetic ketoacidosis has been made. Which investigations best characterize diabetic ketoacidosis?

- a. low serum ph, and bicarbonate, high K
- b. High Ph, low biarbonate, decreased K
- c. High Ph, high bicarb, urinary ketones
- d. Low Ph, low bicarb, serum ketones present
- e. Nomal Ph, low bicarb, absent ketones in serum

Surgery

A 30-year-old woman presents with recurrent urinary tract infections. Urine culture grows *Proteus mirabilis*. Imaging reveals a staghorn calculus. Which type of stone is most likely responsible for her condition?

- a. Calcium oxalate
- b. Uric acid
- c. Struvite
- d. Cystine
- e. Xanthine

A 40-year-old female presents with colicky left-sided flank pain and haematuria. What is the most appropriate investigation to confirm the diagnosis of nephrolithiasis?

- a. Serum calcium and uric acid levels
- b. Abdominal ultrasound
- c. Non-contrast CT scan
- d. Plain abdominal X-ray
- e. Intravenous pyelography (IVP)

A 60-year-old smoker has painless hematuria. Imaging shows a bladder mass. What is the best next step?

- a. TURBT
- b. Start antibiotics
- c. Do urine culture
- d. Schedule chemotherapy
- e. Observe

A young male presents with dysuria, hematuria, and fever. Exam reveals costovertebral angle tenderness. What is the best management?

- a. IV antibiotics
- b. Oral analgesics
- c. Order CT urography
- d. Refer for biopsy
- e. Wait for culture results

A 17-year-old presents with testicular pain for 1 hour. Examination reveals a horizontal, high-riding left testis with tenderness and swelling. Parents inquire about potential outcomes of delaying surgery. What is the primary risk of delayed intervention?

- a. Infertility
- b. Chronic scrotal pain
- c. Testicular necrosis
- d. varicocele
- e. Epididymo-orchitis

A 60-year-old man presents with a progressively enlarging, painless swelling in the right hemiscrotum. Examination reveals a non-tender, fluctuant swelling that transilluminates. He reports difficulty walking due to the size. What is th definitive treatment?

- a. Aspiration
- b. Jabouleys procedure
- c. Sclerotherapy
- d. Antibiotics and analgesics
- e. Watchful waiting

A 60-year-old man presents with a multinodular goitre causing compressive symptoms, including dyspnoea and dysphagia. Patient is biochemically euthyroid CT scan shows significant tracheal deviation and retrosternal extension. What is the most appropriate management?

- a. Total thyroidectomy
- b. Radioactive iodine therapy
- c. Antithyroid medications
- d. Observation with regular follow-up
- e. External beam radiotherapy

A 45-year-old woman presents with a solitary, painless thyroid nodule discovered incidentally on a routine physical exam. Her TSH level is suppressed, and an ultrasound shows a 2.5 cm hypoechoic nodule without calcifications. What is the next best step in management?

- a. Fine-needle aspiration cytology (FNAC)
- b. Radionuclide thyroid scan
- c. Repeat TSH and ultrasound in 6 months
- d. Total thyroidectomy
- e. Molecular testing

A 48-year-old diabetic man has a foot ulcer with crepitus and gas in soft tissues on X-ray. He is febrile with leukocytosis. What is the most critical next step?

- a. Surgical debridement
- b. IV antibiotics
- c. Negative pressure therapy
- d. Toe amputation
- e. Hyperbaric oxygen

A 35-year-old woman presents with a tender, fluctuant lump in her right breast associated with fever and redness of the overlying skin. Ultrasound shows a hypoechoic lesion with irregular margins and posterior enhancement. What is the next best step in management?

- a. Mammography
- b. Core needle biopsy
- c. Antibiotics and ultrasound-guided aspiration
- d. Fine-needle aspiration cytology
- e. Excisional biopsy