

1

{username}

Which of the following factors might significantly interfere with the healing process of a surgical wound?

- a.** *Hypertension*
- b.** *Poor diet*
- c.** *Blood type*
- d.** *Vitamin D deficit*

2

{username}

*A 24-year-old female, now 16 months post gastric bypass surgery.
She is concerned that she has developed vitamin deficiency as a result of the surgery.*

Which of the following vitamins is expected to be in deficit in this patient?

- a.** *Vitamin C*
- b.** *Vitamin B1*
- c.** *Vitamin D*
- d.** *Vitamin B12*

3

{username}

What is the most correct concerning umbilical hernia in children?

- a. Repair immediately when identified due to the risk of incarceration.*
- b. It is standard practice to repair surgically up to one year from birth.*
- c. It is standard practice to repair at the age of 5 years if not closed spontaneously.*
- d. Repair with a mesh in order to reduce the risk for recurrence.*

4

{username}

A 70-year-old male, presents to the ER due what he describes as <yellow eyes= when looking in the mirror. In the past seven months has lost about 10 kg unintentionally. In the ER he was examined by a surgeon who had the impression of a non-tender mass in the upper right abdomen. US in the ER revealed dilation of the bile ducts with no evidence of cholelithiasis.

What is the next step in case management?

- a. Endoscopic ultrasound with FNA biopsy*
- b. Gastroscopy*
- c. ERCP*
- d. Chest and abdomen CT*

5

{username}

Which of the following describes the anatomical location of Zenker's diverticulum?

- a.** *Hasselbach triangle*
- b.** *Callot triangle*
- c.** *Posterior triangle*
- d.** *Killian triangle*

6

{username}

Which of the following clinical characteristics is true for Malignant Phyllodes of the breast?

- a.** *A lumpectomy or mastectomy can be performed depending on the size of the tumor*
- b.** *The tumor usually sends metastases to the lymph nodes*
- c.** *The test of choice to the diagnose the tumor is FNA*
- d.** *A mammography clearly distinguishes between this tumor and fibroadenoma*

7

{username}

A 70-year-old female with invasive ductal carcinoma 3 cm in diameter and an axillary metastasis established in needle biopsy. The tumor's receptor profile is ER+, PR+ and HER2+.

What will be the first line of treatment?

- a. Radiotherapy to the breast and axilla*
- b. Neoadjuvant chemotherapy and biological therapy*
- c. Partial mastectomy and dissection of the sentinel node*
- d. Tamoxifen*

8

{username}

Which imaging test is the most sensitive for the preliminary assessment of acute cholecystitis?

- a. CT*
- b. MRCP*
- c. HIDA SCAN*
- d. US*

9

{username}

Which of the following findings is an absolute indication for cholecystectomy in an asymptomatic patient?

- a. Gallstones measuring 1 cm in gallbladder*
- b. Porcelain gallbladder*
- c. A 5 mm polyp in the gallbladder*
- d. Mild bile sludge*

10

{username}

Which of the following cell groups appears first in the surgical wound healing process?

- a. Neutrophils*
- b. Macrophages*
- c. Fibroblasts*
- d. Lymphocytes*

11

{username}

A 55-year-old female was diagnosed with breast cancer at a diameter of 1.9 cm, ER+, PR+ and HER2-. Pre-surgical imaging did not demonstrate suspicious axillary nodes. Lumpectomy was performed in the operating room.

What is the procedure of choice for the axilla?

- a. Total Axillary Lymph node Dissection (ALND).*
- b. Dissection of the sentinel nodes and their examination in a frozen section and if positive, ALND is to be performed.*
- c. Dissection of the sentinel nodes without a frozen section.*
- d. There is no need to perform resection of the sentinel nodes.*

12

{username}

What is the most recommended treatment for exocrine pancreatic insufficiency in chronic inflammation?

- a. Insulin*
- b. Supplemental pancreatic enzymes with proton pump inhibitors*
- c. ERCP and stent insertion*
- d. Low fat diet and antibiotics*

13

{username}

A 55-year-old kidney transplant male, presents to the ER with fever and pains in the left lower abdomen. In CT, diverticulitis manifested as thickened wall and fat stranding around the sigmoid colon. The patient responds well to the administered treatment, feels well and is a candidate for discharge.

When would it be right to advise the patient to undergo elective surgery?

- a. After the first episode*
- b. After the second episode*
- c. After the fourth episode*
- d. Only in case of recurring episodes that affect quality of life.*

14

{username}

A 23-year-old female, 30 weeks pregnant. Presents to the ER with a clinical picture suspicious as appendicitis. What is the next step in case management?

- a. MRI*
- b. CT with low radiation protocol*
- c. US*
- d. If the symptoms are clear, you may proceed straight to surgery*

15

{username}

A 30-year old male arrives at the trauma center after being involved in a road accident with severe kinematics. Upon his admission, Glasgow coma score 14, pulse 120 per minute, blood pressure 100/60. A FAST ultrasound is performed and fluid is found in the Morison's pouch.

What type of shock is the wounded most likely suffering from?

- a. Cardiogenic shock*
- b. Hemorrhagic shock*
- c. Neurogenic shock*
- d. Septic shock*

16

{username}

Please see below the results of barium swallow test.



What is the most likely diagnosis?

- a.** *Sigmoid Esophagus*
- b.** *Corkscrew Esophagus*
- c.** *Apple core Esophagus*
- d.** *Jackhammer Esophagus*

17

{username}

A 20-year-old woman with a clinical presentation of inflammatory bowel disease.

Which of the following conditions will support the diagnosis of Chron9s and not ulcerative colitis?

- a. Frequent diarrhea*
- b. Anal fistulae*
- c. Rectal bleeding*
- d. Rectal ulcers*

18

{username}

A 48-year-old male presents at the ER with severe epigastric pain radiating to the back, nausea and epigastric sensitivity. Amylase and lipase levels are 5 times the norm.

Which of the following is essential to complete a diagnosis of acute pancreatitis?

- a. Imaging such as CT*
- b. Anamnesis with a factor such as history of chronic alcohol consumption*
- c. Fever over 38.5°C*
- d. Clinics as described in conjunction with increase in lipase/amylase levels 3 times the norm or more*

19

{username}

*Patients after bariatric surgery tend to have different and diverse nutritional deficits.
Of all the surgeries below, which surgery causes the lowest rate of nutritional deficits?*

- a.** *LAP ADJUSTABLE GASTRIC BAND*
- b.** *LAP SLEEVE GASTRECTOMY*
- c.** *RYGB*
- d.** *Biliopancreatic Diversion (BPD) surgery*

20

{username}

A 76-year-old male arrives at the surgery department for a cholecystectomy due to symptomatic cholelithiasis. Patient has underlying diabetes, HTN and chronic renal failure. During preparations for surgery, the patient undergoes blood tests and an ECG that was not previously done.

The ECG is below:



What is the most appropriate electrolyte disturbance for this patient?

- a.** *Hypokalemia*
- b.** *Hyperkalemia*
- c.** *Hypocalcemia*
- d.** *Hypercalcemia*

21

{username}

A 33-year-old male, admitted to the trauma center after a road accident, reported as being runover by a truck as a pedestrian. The ambulance team reports he had a long extrication, was transferred by ambulance, connected to oxygen, to the ER. On his admission - pulse 140 per minute.

A chest X-ray and pelvis X-ray were performed:

Imaging in Trauma Center



What is the immediate next step in case management?

- a.** *A complete evaluation and immediate surgery*
- b.** *Insertion of chest drain on the left*
- c.** *External pelvis fixation*
- d.** *Hospitalization in the ICU*

22

{username}

A 35-year-old male, normally healthy, smoker, admitted to the ER due to severe abdominal pains with a sudden onset. Due to sensitivity on palpation of abdomen it was decided to perform an acute abdominal X-ray. The X-ray is attached herein:



What is the next step in case management?

- a. Emergency surgery.*
- b. Start treatment with PPI and antibiotics and hospitalize for clinical follow-up.*
- c. Emergency gastroscopy in the first 24 hours from his admission.*
- d. Insertion of nasogastric tube, administration of Telebrix and repeat X-ray in 6 hours.*

23

{username}

What is true for mild acute pancreatitis with underlying cholelithiasis?

- a. Remove gallbladder immediately*
- b. There is no need to remove the gallbladder*
- c. Gallbladder removal in the course of the same hospitalization*
- d. Gallbladder removal is recommended about a month after the inflammation subsides.*

24

{username}

A 37-year-old female, 33 weeks pregnant, presented to the ER due to upper right abdominal pains. Upon her admission, fever of 38.8°C. Pulse 90 beats per minute, blood pressure 120/80 mmHg, mild jaundice in conjunctivae. Soft, swollen abdomen, mild sensitivity in upper right quadrant. Lab tests:

Test	Result
WBC	12,000 /mm ³
HB	13 g/dL
BILIRUBIN TOTAL	6 mg/dL
DIRECT BILIRUBIN	4 mg/dL
GGT	380 IU/L
Alk Phosphatase	250 IU/L

Which imaging test will most significantly promote a decision on the diagnosis?

- a. EUS (Endoscopic US)
- b. MRCP (Magnetic Resonance Cholangiopancreatography)
- c. Abdominal CT
- d. Abdominal US

25

{username}

A 35-year-old male with ulcerative colitis, tiredness and itch. Blood tests demonstrate increase in GGT and ALK. PHOS. An MRCP test demonstrates multiple stenoses in intrahepatic bile ducts with intermittent dilated areas.

What is the most likely diagnosis?

- a. Autoimmune hepatitis*
- b. Primary biliary cholangitis*
- c. Primary sclerosing cholangitis*
- d. Cholangiocarcinoma*

26

{username}

Which statement is the most correct on parastomal hernia?

- a. In about half the cases, a parastomal hernia appears when a stoma is formed*
- b. The presence of a parastomal hernia mandates surgical intervention with or without a mesh*
- c. The primary surgical approach is Primary Fascial Repair with low risk of complications and failures*
- d. Most patients are symptomatic and present with bowel obstructions.*

27

{username}

Which of the following conditions is an absolute contraindication for kidney transplant?

- a. The patient is currently a smoker*
- b. Bypass surgery a year ago*
- c. Use of injected drugs*
- d. Tumor disease in their childhood history*

28

{username}

You are called urgently to a 60-year-old patient, a day after a hernia surgery. During your examination, he is in a generalized tonic-clonic seizure.

What is the treatment of choice in this patient?

- a. Intravenous haloperidol*
- b. Intravenous lorazepam*
- c. Intravenous propofol*
- d. Oral phenytoin*

29

{username}

Which of the following mutations is the most common in skin melanoma?

- a. APC*
- b. BRAF*
- c. RAS*
- d. TP53*

30

{username}

A 47-year-old female is urgently operated due to peritonitis. The surgery finds pus all over the abdominal cavity and a punctured appendix, which is resected. The patient is in hospitalization for 6 days post-surgery to manage pains, as well as high glucose levels (over 200). Discharged home and returns to the ER 5 days later. The following finding is discovered in her examination:



What is the immediate therapeutic step in this patient?

- a.** *Hospitalization, fasting and administration of IV antibiotics*
- b.** *VAC dressing*
- c.** *Immediate surgery*
- d.** *Wet to dry dressings*

31

{username}

In which of the following cases where the patient presents with an acute abdomen, the treatment is surgical?

- a. Porphyria*
- b. Buerger disease*
- c. Diabetic crisis*
- d. Addisonian crisis*

32

{username}

A 78-year-old male presents to the ER with abdominal pains, fever, vomiting and blood pressure (BP) of 80/40. You suspect an ADRENAL CRISIS.

Which of the following is the most correct step in this patient's treatment:

- a. Administer saline 0.9% until the shock is controlled*
- b. Administer Hartmann's solution and saline 0.9% at a 1:1 ratio*
- c. Administer saline 0.9% and hydrocortisone*
- d. Administer Hartmann's solution and mineralocorticoids.*

33

{username}

A 19-year-old male is brought to the trauma center after having been shot in both legs, his left hand and right upper chest Examination: 25 breaths per minute, pulse 116, BP 83/59. Hemorrhagic shock is suspected.

Keeping in mind the <trauma triad of death=, which of the following actions is the most recommended?

- a. Cover the victim with a warm blanket*
- b. Cool the room*
- c. Start administering vitamin K IV*
- d. Start administration of Hartmann's solution 3000 ml*

34

{username}

Which of the following combinations of findings raises the suspicion that the patient has Glucagonoma type tumor? (Choose the most accurate answer)

- a. High blood gastrin level, several ulcers in the duodenum, tumor in the thyroid, and a NON B CELL tumor in the pancreas.*
- b. Diabetes, dermatitis and depression*
- c. High blood testosterone level, hypertension, novel diabetes*
- d. High blood gastrin level and ACTH-secreting tumor in the hypophysis*

35

{username}

Which of the following actions is considered an integral part of DAMAGE CONTROL RESUSCITATION?

- a. Maintain systolic BP of at least over 100, with epinephrine/norepinephrine if necessary*
- b. Maintain systolic BP of at least over 100, with saline 0.9% in half a liter boluses*
- c. Early use of blood and its products.*
- d. Use of anticoagulants such as enoxaparin to prevent blood clots.*

36

{username}

Which of the following principles is fundamental in the trauma treatment protocol (ATLS)?

- a. It is mandatory to achieve a certain diagnosis before treatment*
- b. It is mandatory to obtain a complete anamnesis before treatment*
- c. It is mandatory to treat all injuries*
- d. Treatment is performed by order of injury severity*

37

{username}

Which of the following is a protective factor against surgical site infection (SSI)?

- a. Laparoscopic surgery*
- b. Steroid treatment*
- c. Obesity*
- d. Prolonged pre-operative hospitalization*

38

{username}

What is the most correct regarding epigastric hernias?

- a. An epigastric hernia usually appears in several anatomical sites*
- b. An epigastric hernia is more common in men.*
- c. In most cases, the pain in the epigastric hernia is not related to the incarceration of hernia.*
- d. Most hernias do not occur in the midline.*

39

{username}

In which of the following surgeries, the only mechanism of action is restriction?

- a.** *Vertical banded gastroplasty*
- b.** *Sleeve gastrectomy*
- c.** *Roux-n-y Gastric Bypass*
- d.** *Biliopancreatic diversion/Duodenal switch*

40

{username}

You are passing through the ER and the internal medicine doctor calls you to <take a peak= at a patient they are concerned about and they think the patient has a Cullen sign. Upon examination you see the following picture:



Given the described information - what is the patient most likely suffering from?

- a.** Portal hypertension
- b.** Hemoperitoneum
- c.** Ruptured common bile duct
- d.** Acute appendicitis

41

{username}

What is the most common reason for small intestine obstruction in western countries?

- a. Inguinal hernias*
- b. Surgical adhesions*
- c. Malignant tumors*
- d. Crohn's disease*

42

{username}

A 55-year-old male complains of episodic abdominal pain, nausea, vomiting and abdominal swelling. A CT scan shows <whirl sign= and a dilated U shaped loop with sharp edges.

What is the most likely diagnosis?

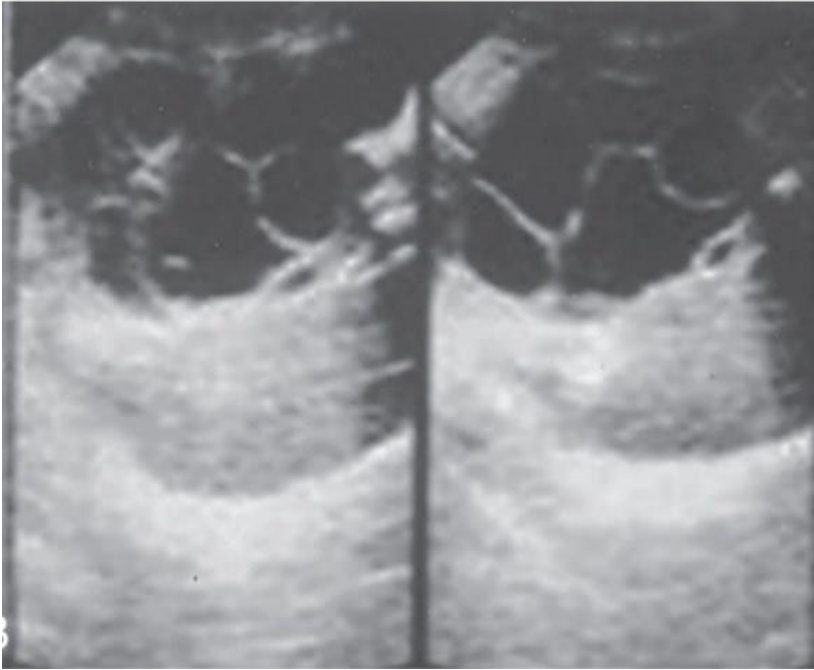
- a. Intussusception*
- b. <Closed loop= small intestine obstruction*
- c. Small intestine obstruction due to simple adhesions*
- d. Ogilvie syndrome*

43

{username}

A 45-year-old male, resides in the Negev, presents to the ER with abdominal pains and dyspepsia. Indices included pulse 97, BP 110/81, saturation 96%, temperature of 36.6°C.

Enlarged liver in physical examination. The patient undergoes a US - presented below:



*Interpretation: 5 cm finding with calcifications in the wall and a rosette appearance structure
What is the most likely diagnosis in this patient?*

- a.** Primary liver tumor (HCC)
- b.** Hydatid cyst
- c.** Metastasis
- d.** Pyogenic abscess

44

{username}

What is the most important primary therapeutic principle in the first hours of acute pancreatitis?

- a. Administration of broad spectrum antibiotics*
- b. Fasting for 72 hours*
- c. Electrolyte resuscitation and administration of IV fluids*
- d. Insertion of a nasogastric tube*

45

{username}

A patient following emergency laparotomy due to trauma. On the third day after the surgery he has a fever and a cloudy discharge from the wound. - The following picture is described:



What is the most common reason for this condition?

- a. Fascia closure is too loose*
- b. Fascia closure with mesh*
- c. Bowel ischemia*
- d. Intra-abdominal abscess or infection*

46

{username}

A 58-year-old male, admitted due to epigastric pains and imaging raises suspicion of a liver abscess. Which of the following findings will help differentiate between pyogenic abscess and amebic abscess?

- a.** *Alcoholism in anamnesis*
- b.** *Increased levels of ALP (alkaline phosphatase)*
- c.** *Lesion location on the right side of the liver*
- d.** *Positive blood culture*

47

{username}

A 72-year-old male, underlying liver cirrhosis, presents to the ER with complaints of left lower abdomen pains, accompanied by nausea and vomiting for the past 3 days, fever 37.2°C, WBC 13,000. In his examination he appears to be in pain, sensitivity in the left lower abdomen with local guarding. Abdominal CT is performed (see attached image).



What is the disease grade according to the Modified Hinchey scale?

- a.** Ib
- b.** IIa
- c.** IIb
- d.** III

48

{username}

*An 85-year-old male, diagnosed with an obstructive tumor in the sigmoid colon.
What is true about stent insertion during a colonoscopy in this condition?*

- a. Increases the chance to complete the surgery using laparoscopic approach*
- b. Increases the chance for stoma*
- c. Improves oncologic outcome (survival and disease free survival)*
- d. Increases the chance for surgical wound infections*

49

{username}

What is true regarding DCIS (Ductal Carcinoma In Situ)?

- a. Resection margins of 0.5 mm are considered sufficient*
- b. It is not standard practice to perform a complete mastectomy since the disease is not invasive*
- c. Radiotherapy will usually follow after partial resection (lumpectomy)*
- d. There is no need to administer hormonal treatment after the surgery since the tumor is not invasive*

50

{username}

Which of the following conditions is the most common cause for colon obstruction?

- a. Diverticulitis*
- b. Adhesions*
- c. Stool*
- d. Malignant tumor*

51

{username}

A 40-year-old male recounts repeated <sinusitis= events for several months with purulent nasal discharge. At the same time he also has cough and hemoptysis. Several courses of antibiotics were ineffective. Lab tests demonstrate anemia and new renal dysfunction with creatinine 2.0 (normal range 0.5-1.2).

What is true concerning this patient's disease?

- a. Involvement of the upper respiratory tracts is rare.*
- b. Antiproteinase-3 ANCA antibodies are positive in most patients.*
- c. Renal involvement is typically mild and does not result in terminal renal dysfunction.*
- d. Treatment with steroids and cyclophosphamide results in remission in a small number of patients.*

{username}

A 34-year-old woman arrives at the ER due to tiredness, dizziness and dyspnea when climbing stairs. Examination: mild cyanosis in lips, increased heart sounds including prominent P2, bilateral edema in ankles. Saturation is 89% in room air. ECG shows right ventricle strain, echo shows right ventricular hypertrophy and pulmonary pressure is estimated at 60 mmHg. Lung functions, chest CT and lung scan are normal.

Which of the following tests will promote diagnosis in the most significant way?

- a. Troponin test*
- b. Coronary catheterization*
- c. BNP (Brain Natriuretic Peptide)*
- d. Right heart catheterization*

{username}

A 74-year-old male is hospitalized in the internal medicine department due to pneumonia.

On the fourth day of his hospitalization, he reports significant weakness.

Physical examination - irregular pulse, no signs of poor perfusion.

ECG shows the following findings: T waves flattening, appearance of prominent U waves, prolonged QT, frequent premature ventricular beats (frequent PVCs).

Lab:

	Creatinine (mg/dL)	Potassium (mmol/L)	Sodium (mmol/L)	Magnesium (mEq/L)
Normal	0.5-1.2	3.5-5.3	133-145	1.6-2.0
	0.9	2.5	140	1.2

What is the most correct urgent next step in the management of the patient?

- a. Administration of intravenous potassium only
- b. Administration of intravenous magnesium followed by potassium replacement
- c. Discontinuation of antibiotics and follow-up at this stage
- d. Administration of fluids - SALINE 0.9%

54

{username}

A 29-year-old female, normally healthy, visits the clinic with intermittent wheezing in respiration, dyspnea and chest pressure for the past six months. The symptoms are aggravated at night and in the morning, and in exposure to cold air, exertion and dust. Does not have a history of similar symptoms. Notes that she uses a Ventolin inhaler from time to time with temporary relief. Does not smoke, no recent infectious disease. Physical examination, including lungs, within norm. Normal lung functions.

Under suspicion of asthma diagnosis, which of the following statements is the most correct?

- a. In this case, a diagnosis of asthma can be determined by anamnesis alone, and there is no need for further investigation*
- b. Asthma diagnosis can be ruled out due to normal pulmonary functions, and further diagnostic investigation is necessary*
- c. Based on the clinical improvement with Ventolin inhaler, an asthma diagnosis can be established*
- d. In view of the clinical suspicion, a methacholine challenge test needs to be performed*

55

{username}

A 60-year-old female visits the general practitioner with complaints of tiredness, joint aches (arthralgia), swelling and itching in fingers that appeared several months ago.

There is now skin rigidity with limitation in flexion.

Examination: fixed finger flexion, telangiectasias, ischemia in fingertips.

Which of the following statements is the most correct concerning this disease?

- a. Raynaud syndrome is pathognomonic for this disease.*
- b. Pulmonary hypertension usually does not affect prognosis.*
- c. Most patients with a systemic disease have symptoms of gastroesophageal reflux disease (GERD).*
- d. Renal crisis happens mostly in patients with dermal disease only many years after disease onset.*

56

{username}

A 38-year-old female, normally healthy, presented to the doctor due to recurring headaches.

A finding consistent with a Pituitary Mass was found in an MRI performed as part of the investigation.

Later the possibility of functional pituitary adenoma was assessed.

Which of the following findings is the most common and characteristic of functional pituitary adenoma?

- a. Decrease in free T4 levels*
- b. Decrease in morning fasting cortisol levels*
- c. Increase in prolactin levels*
- d. Decrease in TSH levels*

57

{username}

A 64-year-old male with chronic mitral regurgitation. Has been complaining recently of dyspnea with moderate exertion. Heart echo demonstrated ejection fraction (LVEF) of 45%, enlarged left ventricle, severe mitral regurgitation and normal function of the other valves.

Which of the following findings constitutes an indication for a surgical correction or replacement of the mitral valve in the patient's current condition?

- a. Holosystolic murmur graded 3/6*
- b. First appearance of atrial fibrillation*
- c. LVEF decrease to under 60%*
- d. Enlargement of left atrium over 40 mm*

58

{username}

A 32-year-old male with Hypertrophic Obstructive Cardiomyopathy (HOCM) and a family history of sudden death. Comes in for consultation to adjust medicinal treatment. The patient reports symptoms of dyspnea in exertion and dizziness, with no clear signs of heart failure.

Which medication should be avoided in this case?

- a. Digoxin*
- b. Disopyramide*
- c. Verapamil*
- d. Bisoprolol*

59

{username}

An 82-year-old female is admitted due to fever for the past 24 hours, altered consciousness, and tonic-clonic seizure. The woman has no significant underlying diseases. The physical examination is normal except for reduced consciousness and fever. CT without contrast agent is normal. No nuchal rigidity in examination. Lumbar puncture finds 250 white blood cells, out of which 95% lymphocytes. Slightly elevated protein level and normal glucose level.

What is the most correct concerning the diagnosis and treatment of this patient at the ER?

- a.** *Treatment of this patient includes Vancomycin, Ceftriaxone, Ampicillin*

- b.** *Treatment of this patient includes Vancomycin, Ceftriaxone, Ampicillin and Dexamethasone*

- c.** *Acyclovir treatment will be administered empirically before PCR result*

- d.** *Acyclovir treatment will be administered only if PCR is positive for CMV.*

60

{username}

Several patients at the medical center have been diagnosed with a primary infection of Cytomegalovirus (CMV), each of them belongs to a different risk group.

Who of the patients is in the highest risk of developing a serious and even life-threatening disease as a result of the infection?

- a. A 20-year-old soccer player, normally healthy*
- b. A five-year-old boy, no underlying diseases*
- c. Kidney transplant patient*
- d. A 32-year-old women, in week 30 of her first pregnancy*

61

{username}

A 67-year-old male, past smoker (40 pack-years), in the past year - exacerbation in dyspnea, chronic productive cough and wheezing. Examination: prolonged expirium, use of auxiliary muscles, saturation in room air is 95%. Chest X-ray: severe emphysema in superior lobes. Pulmonary functions: $FEV_1/FVC = 0.62$, $FEV_1 = 35\%$ of predicted.

Which of the following treatments has been proven to reduce mortality in this condition?

- a. Long-Acting Beta Agonists (LABAs)*
- b. Inhaled steroids*
- c. Connection to home oxygen*
- d. Lung volume reduction surgery*

{username}

A 45-year-old male visits the gastroenterology clinic due to chronic diarrhea that started about 9 months ago. According to him, the stools are soft to watery, with a foul smell, and they float in the water. In addition, he reports an unexplained weight loss of 6 kg and tiredness.

There is no blood in stool and no fever.

Lab tests demonstrated: MCV 72 FL, Hb 10.2 g/dL, low ferritin, anti-TTG IgA serology: positive.

A gastroscopy with duodenum biopsies was performed, which demonstrated: complete villous atrophy, Crypt hyperplasia, Increased intraepithelial lymphocytes

What is the most correct next step in the management of this case?

- a. Initiate steroids*
- b. Initiate low-lactose diet*
- c. Initiate gluten-free diet*
- d. Perform an MRI of the small intestine to rule out Crohn's disease*

63

{username}

A 75-year-old male visited the doctor after a blood count showing leukocytes 25000 μ L, out of which lymphocytes 10000 μ L, blood count results have been similar in the past six months. The rest of the blood panel results are normal. The patient is completely asymptomatic. Flow cytometry diagnosed Chronic Lymphocytic Leukemia (CLL).

What is correct regarding the management of this case at this stage?

- a. Start Ibrutinib*
- b. Recommended follow-up only, there is no need for treatment at this time*
- c. Start steroid treatment*
- d. Start Venetoclax*

{username}

A 62-year-old male, hospitalized for the first time in his life due to intense pain in the anterior chest and dyspnea for about ten hours, diagnosed with STEMI inferior wall myocardial infarction. Treated with primary PCI to the right coronary artery. After a few days, reports of increasing dyspnea. In his examination, no fever, BP 100/60 mmHg, pulse 112 per minute, regular, respiratory rate 28 per minute. Increased jugular venous pressure. In lung auscultation, rhonchi are heard to the middle of the pulmonary fields, bilaterally. In heart auscultation, a new holosystolic murmur is heard, graded 3/6 in the apex, radiating to the axilla, ECG - sinus rhythm, Q waves and T waves inversion in aVF, III, II. Cardiac catheterization demonstrated patent stent in the right coronary artery. The findings of the right heart catheterization are below:

Chamber	Pressure (mmHg)	Oxygen saturation (%)
Right atrium (RA)	12	71%
Right ventricle (RV)	62/12	73%
Pulmonary artery (PA)	62/28	72%
Pulmonary capillary wedge pressure (PCWP)	26	96%

What is the most likely diagnosis?

- a. Pericardial tamponade
- b. Ventricular septal defect (VSD)
- c. Recurring myocardial infarction
- d. Papillary muscle rupture

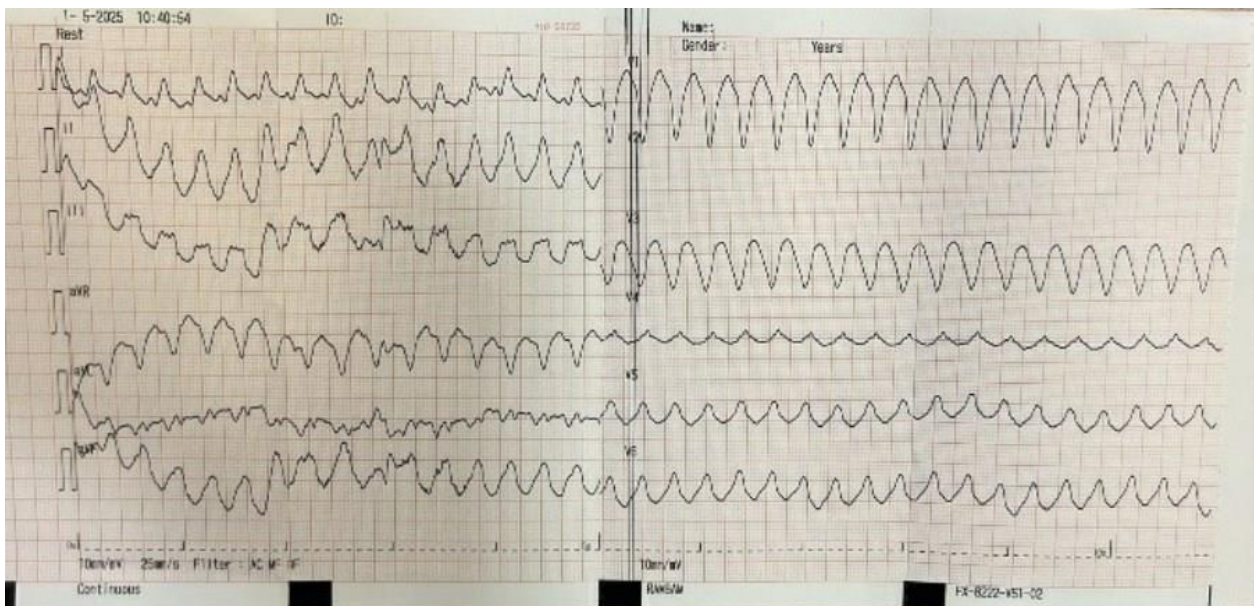
65

{username}

A 64-year-old male, background of anterior wall myocardial infarction 3 years ago and reduced left ventricle ejection fraction to 35%. Presented to the ER due to fast palpitations, dizziness and sudden shortness of breath.

In his examination: preserved consciousness, but appears stressed, blood pressure 80/55 mmHg, cold limbs, no edema, regular heart sounds, no murmurs

ECG chart is presented below:



What is the most appropriate next step in this patient's treatment:

- a. Administration of intravenous amiodarone
- b. Synchronized cardioversion
- c. Administration of intravenous adenosine
- d. Administration of intravenous metoprolol

66

{username}

A 68-year-old female, with a background of type 2 diabetes and hypertension, hospitalized for pneumonia and treated with ceftriaxone antibiotic for the past 7 days. The patient has been complaining of multiple watery diarrhea, low-grade fever and abdominal pains. Lab tests found elevated leukocytes, and stool test was diagnosed with the presence of Clostridioides difficile toxin A.

What is the best first step in the management of this case?

- a. Opiates to stop the diarrhea*
- b. Metronidazole as the treatment of choice*
- c. Stop administration of ceftriaxone*
- d. Steroids*

67

{username}

A 60-year-old male is a candidate for a CT test with contrast agent injection.

Which of the following has the lowest risk of developing renal failure secondary to contrast agent injection?

- a. Chronic renal failure*
- b. Prerenal renal failure*
- c. Old age*
- d. Hypoalbuminemia*

68

{username}

A 26-year-old female with Systemic Lupus Erythematosus for the past 5 years. In the past week, has been feeling general weakness, and after investigation, she was diagnosed with Autoimmune Hemolytic Anemia.

Which of the following lab test results is the most suitable for this patient?

- a. MCV, MCH usually decreased*
- b. Haptoglobin usually increased*
- c. Reticulocytes usually increased*
- d. conjugated bilirubin increased compared to unconjugated*

69

{username}

A 30-year-old male with a history of Ulcerative Colitis for the past 5 years, presents to the gastroenterology clinic due to exacerbation for the past 3 months with bloody diarrhea and spasmodic abdominal pains. In the past he was well managed under treatment with oral 5-ASA, but recently there has been a gradual worsening of symptoms. It was decided to initiate treatment with Vedolizumab.

What is the most accurate characteristic of this medication?

- a. It is a biological antibody against TNF-³*
- b. There is no need for an HBV screen test before starting treatment*
- c. The medication raises the risk for JC virus infection and progressive multifocal leukoencephalopathy (PML)*
- d. Absence of systemic immunosuppression*

70

{username}

A 64-year-old male, heavy smoker, 50 pack-years, complains of chronic cough with hemoptysis in the past month, loss of 7 kg in six months, and tiredness.

Physical examination: no fever, saturation 95% in room air, reduced respiratory sounds in right lung base, no palpated jugular nodes.

Chest X-ray - peripheral mass in the right lung. Head CT - normal, PET-CT - lesion in the lung alone, no pathological uptake in other areas.

What is the best step in the management of this case at this stage?

- a. Immediate referral to right lobectomy*
- b. Start chemotherapy plus immunotherapy*
- c. Pulmonary biopsy for histological diagnosis confirmation*
- d. Targeted radiation to the pulmonary mass*

71

{username}

An 88-year-old male presenting with dyspnea and peripheral edema. No history of known cardiac disease. Echocardiography demonstrated left ventricle hypertrophy with preserved systolic function and dilation of left atrium. In ECG, low voltage of QRS and atrial fibrillation.

What is the most likely diagnosis?

- a. Longstanding Systemic Hypertension*
- b. Hypertrophic Cardiomyopathy*
- c. Cardiac Amyloidosis*
- d. Takotsubo cardiomyopathy*

72

{username}

A 72-year-old male, with increasing dyspnea over the past year, dry cough, no occupational exposure or rheumatologic diseases, saturation 92%, wheezing in lung bases, clubbing.

Negative autoimmune investigation. Chest X-ray and chest CT (High-Resolution CT) demonstrates honeycombing and Traction bronchiectasis in lung bases - A finding typical for Idiopathic Pulmonary Fibrosis (IPF).

Which of the following treatments is the most suitable in this case?

- a. Steroids*
- b. Non-steroid immunosuppressive treatment*
- c. Pirfenidone*
- d. Prolonged antibiotic treatment with Azithromycin*

73

{username}

A 50-year-old male is admitted to the internal medicine department with suspected poisoning.

Blood tests: metabolic acidosis with increased anion gap. Urinalysis: oxalate crystals.

Which poisoning is the most likely?

- a. Metformin*
- b. Mannitol*
- c. Ethylene glycol*
- d. Aspirin*

74

{username}

A 65-year-old male with a history of myasthenia gravis and epilepsy, hospitalized due to urinary tract infection. The medical team is considering starting Fluoroquinolones antibiotics.

What is the most true regarding this class?

- a. This drug does not cause Clostridioides difficile type infection*
- b. There is no contraindication to using this drug in myasthenia gravis patients*
- c. The drug does not affect QT interval in ECG*
- d. Use of the drug might cause Achilles tendon rupture*

{username}

A 34-year-old woman visits the doctor with complaints of chronic progressing fatigue, dry mouth and dryness in eyes over the past year. She reports joint aches from time to time, but with no significant swelling in joints or stiffness in the morning. Notes that she needs to sip water when eating dry foods and she uses artificial tears several times a days. Rules out photosensitive rash, oral ulcers or hair loss.

Physical examination showed mild bilateral enlargement of the parotid salivary glands. No synovitis was observed.

In laboratory tests, complete blood count: normal, serum creatinine: normal, urinalysis: normal Antinuclear Antibody (ANA) positive, titer 1:320, Anti double Stranded DNA Antibody (Anti dsDNA) negative, Anti Smith Antibody negative.

Which of the following antibodies is the most likely to be positive in this patient?

- a.** *Anti-centromere antibodies*
- b.** *Anti-Ro/SSA and anti-La/SSB antibodies*
- c.** *Anti3topoisomerase I (anti-Scl-70) antibodies*
- d.** *Anti3U1-ribonucleoprotein (anti-RNP) antibodies*

76

{username}

A 32-year-old female with amenorrhea for the past six months, breast congestion, bilateral galactorrhea and headaches, diagnosed with hyperprolactinemia. Prolactin levels test show a value of 220 ng/mL (normal range 4-25). Negative pregnancy test.

What is the most recommended next step in case management?

- a. Referral to brain MRI.*
- b. Start Bromocriptine treatment.*
- c. Perform a Dopamine agonist suppression test.*
- d. Referral to tumor resection surgery.*

77

{username}

A 56-year-old female with Heart Failure with Reduced Ejection Fraction (HFrEF) due to alcoholic cardiomyopathy, maintains sinus rhythm at rest (85 beats per minute) but continues to experience dyspnea with mild exertion, despite optimal care according to guidelines, including Spironolactone, Sacubitril/Valsartan (Entresto), Empagliflozin and Bisoprolol at the maximum tolerated dose.

What additional treatment is the most suitable at this stage?

- a. Ivabradine*
- b. Diltiazem*
- c. Vasopressin*
- d. Amlodipine*

78

{username}

A 29-year-old female, normally healthy, no regular medications and no meaningful family history, visits the clinic due to persistent dry cough, joint aches and tiredness.

Rules out fever and weight loss

Examination: lesions in legs (erythema nodosum), Chest X-ray: bilateral enlargement of lymph nodes in lung hila. Lung hila biopsy: non-necrotic granulomas

What is the most likely diagnosis in this case?

- a. Systemic lupus erythematosus (SLE)*
- b. Sarcoidosis*
- c. Infection with pulmonary tuberculosis*
- d. Rheumatoid arthritis with pulmonary involvement*

79

{username}

A 65-year-old woman, hospitalized in the orthopedics department following hip replacement surgery, received treatment with Unfractionated Heparin for 6 days, following which a blood count was performed, which demonstrated 45,000 platelets per microliter (her baseline is normally 160,000 platelets per microliter).

What is the best next step in the management of this case?

- a. Continue Unfractionated Heparin while monitoring blood tests daily*
- b. Change treatment to Low Molecular Weight Heparin (LMWH)*
- c. Start treatment with Rituximab (Anti CD 20)*
- d. Stop Unfractionated Heparin and start direct thrombin inhibitor*

{username}

A 68-year-old male with an artificial aortic valve implanted 20 years ago, is hospitalized due to a two-day fever. Three separate blood cultures show gram-positive cocci.

Which of the following statements is the most correct concerning the diagnosis and treatment of this patient?

- a. The treatment of endocarditis is the same for a natural valve and an artificial valve, and depends only on the type of the bacteria*
- b. The likelihood for an infection of an artificial valve with coagulase negative staphylococci exceeds 90%*
- c. Transthoracic Echocardiography (TTE) only is sufficient, since the risk for endocarditis in this case is low (about 1-3%)*
- d. FDG-PET (Positron Emission Tomography) is more sensitive than TTE in the identification of endocarditis in an artificial valve*

81

{username}

A 77-year-old patient, known history of chronic obstructive pulmonary disease, under chronic treatment with Prednisone 5 mg a day, bronchodilators and Azenil as prophylactics, brought to the ER with reduced consciousness, pulse 140 per minute, fever 39°C, blood pressure 89/60 mmHg, room air oxygen saturation 88%, monitor shows sinus tachycardia.

What is the most correct first therapeutic step in this patient?

- a. Administer fluids at a rate of 1 liter/hour and hydrocortisone 100 mg intravenously*
- b. Administer broad spectrum antibiotics due to the suspicion for an infectious process*
- c. Administer inhalations and high concentration oxygen due to desaturation*
- d. Administer B-BLOCKER due to tachycardia*

82

{username}

A 62-year-old female complaining of gradual exacerbation for the past 5 years in exertion intolerance and recent formation of edemas in ankles. Rules out history of heart failure, kidney disease, liver disease or anemia. Examination: Prominent a waves in jugular veins examination (JVP), left parasternal heave, low frequency vibrating diastolic murmur. ECG: Biatrial enlargement, no additional findings.

What is the most likely diagnosis?

- a. Mitral valve stenosis*
- b. Pericardial tamponade*
- c. Pulmonary valve stenosis*
- d. Left systolic cardiac insufficiency*

83

{username}

A 65-year-old male visits the outpatients clinic 3 weeks after discharge from hospitalization due to anterior STEMI. For the past two days has been complaining of ongoing sub-febrile fever and pleuritic chest pain, which began gradually. Rules out dyspnea, orthopnea or peripheral edemas. In his examination, hemodynamics is stable, normal heart sounds, no murmurs or rub. Lungs are clear bilaterally. Repeat ECG does not demonstrate new ischemic changes compared to the chart from the day of his discharge. Chest X-ray, blood count and troponin levels within norm.

Which of the following therapeutic options is the most suitable at this time?

- a. Empirical treatment with broad spectrum antibiotics*
- b. Treatment with high dose Aspirin, 650 mg 4 times a day*
- c. Treatment with Warfarin and striving for INR around 2.5-3.0*
- d. Increasing the dosing beta-blockers or nitrates*

84

{username}

A 50-year-old male, recently diagnosed with Minimal Change Disease (MCD)

Which of the following is the most correct statement regarding this disease?

- a. The disease can be related to Hodgkin lymphoma*
- b. In most cases, blood pressure will be increased*
- c. Treatment with NSAIDs can slow down disease progression*
- d. White cell sediment in urine is seen in this disease*

85

{username}

A 68-year-old male, recently diagnosed with Acute Myeloid Leukemia, the patient was transferred for further treatment at the hematology department.

Which of the following prognostic factors is the most favorable for this patient?

- a. The t(15;17) chromosomal aberration*
- b. History of MDS or myeloproliferative disorders*
- c. Prolonged cytopenia preceding AML*
- d. High presenting leukocyte count ($>100,000/\text{L}$)*

86

{username}

A 62-year-old male complains of exertional dyspnea and dry cough that have been worsening over the past year. In background, seropositive rheumatoid arthritis (RA) for the past 6 years. Treated with Methotrexate, Tofacitinib and folic acid.

Physical examination: normal vital signs, no jugular congestion. Heart: regular rhythm, first and second sound are normal and no additional sounds. Lungs: reduced air entry in both lungs, dry inspiratory rhonchi in bases, symmetrical and normal percussion resonance bilaterally. Joint examination: advanced RA changes in hands and wrists. Rest of examination: normal

What is the most likely reason for exertional dyspnea in this patient?

- a. Heart failure*
- b. Interstitial lung disease*
- c. Pulmonary hypertension*
- d. Pleural effusion*

87

{username}

A 45-year-old male is hospitalized for investigation of fever. Fever has lasted about three weeks, and is accompanied by joint aches and night sweats. The patient ruled out any underlying diseases, nature hikes or unprotected sexual intercourse. He does not drink alcohol nor uses drugs. Notes consumption of unpasteurized goat milk. In blood cultures, growth of gram-negative bacteria.

Which of the following statements most accurately describes the clinics and treatment of this infection?

- a. Osteomyelitis usually affects the lower spine*
- b. The most common complication is endocarditis*
- c. The treatment of choice is Ciprofloxacin*
- d. The treatment of choice is Ceftriaxone*

88

{username}

An 80-year-old male was hospitalized in the general ICU due to severe pneumonia that required mechanical ventilation. Lab tests found normal TSH and T4 levels and a mild decrease in T3.

Which of the following options is the most correct in relation to the patient's condition?

- a. This is hypothyroidism; due to the patient's advanced age, initiate treatment with low dose Eltroxin, 25 mcg a day.*
- b. No treatment is needed at the moment; in light of the acute disease, repeat the tests after improvement in the patient's general condition.*
- c. This is hyperthyroidism; due to the severity of the patient's condition, initiate treatment with Eltroxin 100 mcg a day.*

89

{username}

A 64-year-old male is admitted to the ER following three episodes of hematemesis during the night, accompanied by pressing epigastric pain. He also reports dizziness in transitioning from lying to standing and general weakness. No fever and no history of known hemorrhagic diseases. He takes Nonsteroidal Anti Inflammatory Drug (NSAIDS) daily due to osteoarthritis. Examination: pale mucosa, blood pressure: 85/60 mmHg, pulse 128 beats per minute. Lab tests - hemoglobin level 9.1 g/dL, six months ago hemoglobin level was normal.

What is the most urgent and critical next step in the preliminary management of the patient?

- a. Starting intravenous PPI*
- b. Blood unit transfusion*
- c. Urgent endoscopy*
- d. Fluid resuscitation*

90

{username}

A 76-year-old male, background of type 2 diabetes and CVA in the past, hospitalized in the internal medicine department and has had a catheter inserted for the past 10 days for monitoring urine output. In a routine urinalysis performed now, high level of Candida Glabrata was found. The patient has no fever, no systemic pains, no clinical evidence of pyelonephritis or sepsis.

Referring to the candida finding in this patient, which of the following statements is the most correct?

- a. Candida non-albicans is present at a low proportion among the isolates*
- b. The disease range is very wide, from lack of symptoms to pyelonephritis*
- c. Antifungal treatment is recommended in any case of isolating candida in urine*
- d. The removal of the catheter solves the problem in 10% of the cases*

91

{username}

A 24-year-old female, no underlying diseases, referred to the ER in confused state with fever increase to 38.4°C. Lab tests:

	Hemoglobin (g/dL)	Leukocytes (x10 ³ /μL)	Platelets (x10 ³ /μL)	Fibrinogen (mg/dL)
Normal	11.5-15	4-10.8	130-400	180-450
	8.2	6.7	16	300

	Creatinine (mg/dL)	Total Bilirubin (mg/dL)	Direct Bilirubin (mg/dL)	Lactate Dehydrogenase (U/L)
Normal	0.5-1.2	0.2-1.2	0-0.5	125-220
	2.5	5.5	0.5	1150

Schistocytes in blood smear.

Which of the following diagnoses is the most likely?

- a.** ITP (Immune Thrombocytopenic Purpura)
- b.** TTP (Thrombotic Thrombocytopenic Purpura)
- c.** Aplastic anemia
- d.** Sickle cell anemia crisis

{username}

A 50-year-old female comes to the general practitioner due to persistent tiredness and a disturbing itching sensation that appears mainly in the evening hours. There is no weight loss, fever or poor appetite. Physical examination - normal skin, no hepatomegaly or jaundice. The patient does not consume alcohol, does not smoke and there is no family history of liver diseases. Blood tests show: ALP 3 times the norm, ALT and AST in the upper limit of norm, normal bilirubin, Positive Anti Mitochondrial Antibody (AMA)

Which of the following diagnoses is the most likely?

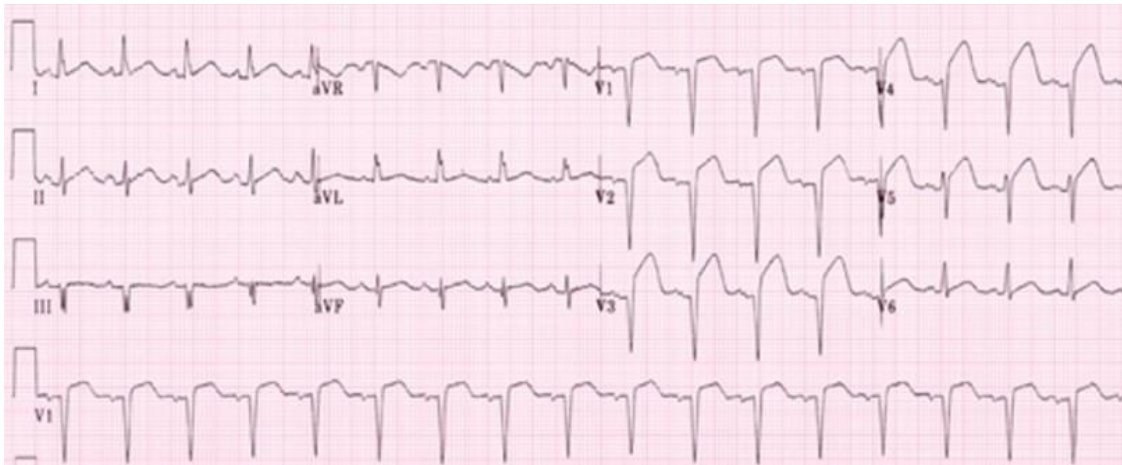
- a.** *Primary sclerosing cholangitis (PSC)*
- b.** *Autoimmune hepatitis (AIH)*
- c.** *Primary biliary cholangitis (PBC)*
- d.** *Non-alcoholic steatohepatitis (NASH)*

93

{username}

A 58-year-old female, evacuated to the hospital due to the sudden onset of sharp pain in the anterior chest, accompanied by sweats and hypotension.

Her admission ECG chart is presented below:



What is the most likely pathophysiological mechanism at the base of the clinical and electrocardiographic expression of her condition?

- a. Complete thrombotic occlusion of an epicardial coronary artery that has been previously affected by atherosclerosis*
- b. Progression of a chronic coronary lesion up to a stenosis of 90%.*
- c. Discrepancy between the metabolic requirements of the myocardium and blood flow in the myocardium in a partially occluded coronary artery as a result of exertion.*
- d. Extensive pericarditis.*

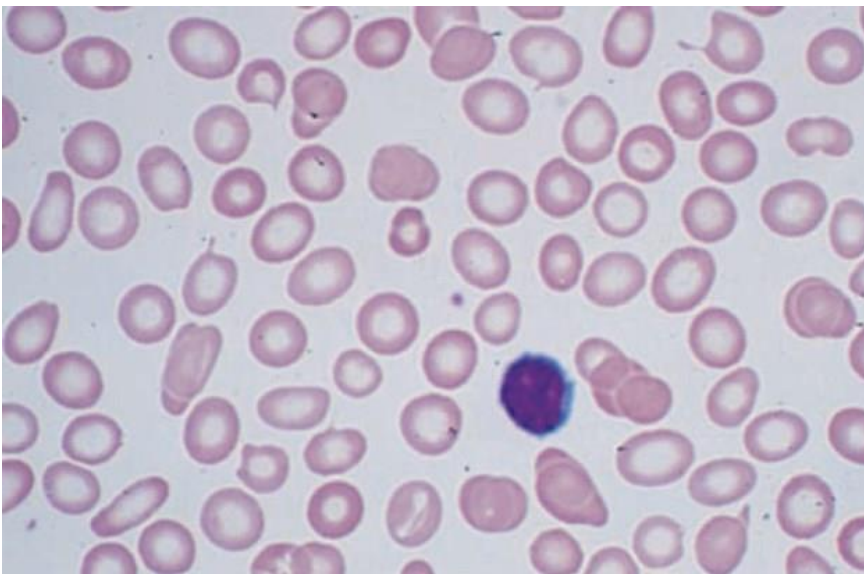
94

{username}

A 35-year-old female visited the doctor due to significant general weakness.
In physical examination: pallor, tachycardic, BP 100/60 mmHg. Lab tests:

	Hemoglobin (g/dL)	MCV (fl)	MCH (pg)
Normal	11.5-15	80-98	25-33
	8.2	77	16

An image of blood smear is attached:



Which of the following diagnoses is the most likely?

- a. Macrocytic anemia of B12 deficiency
- b. Hypochromic microcytic anemia of iron deficiency
- c. Aplastic anemia
- d. Hemolytic anemia

95

{username}

A 26-year-old male, underlying Crohn's disease, presents in due to bilateral pains in legs. Physical examination demonstrated sensitive, red and raised lesions over the front part of the shins.

What is the most correct concerning the clinical finding?

- a. This finding is more common in ulcerative colitis patients than in Crohn's disease*
- b. This finding is not related to the bowel disease's activity level*
- c. This finding often appears in combination with peripheral arthritis*
- d. This finding requires topical treatment with steroids and antibiotics*

96

{username}

A 32-year-old male visits the doctor due to fever up to 38.5°C, rash, and swelling in the knees and wrist. The patient says there was also swelling in the ankle that later resolved. Anamnesis includes a history of unprotected sexual intercourse. In arthrocentesis, 15,000 neutrophils. Gram stain is negative.

Which of the following treatments is the most recommended in this case?

- a. Non-Steroidal Anti-Inflammatory Drugs.*
- b. Intraarticular steroid injection*
- c. Vancomycin IV*
- d. Ceftriaxone IV*

{username}

A 62-year-old male is hospitalized for investigation of fever and productive cough. The patient reports that in the distant past he was a prison inmate for a few years. Fever and cough have lasted for about two months, and are accompanied by night sweats and weight loss. Physical examination reveals cachexia, cough and gross inspiratory rhonchi in right lung apex. Lab shows anemia and increased inflammatory indices. A chest X-ray was performed, attached.



Which of the following tests is the quickest in order to diagnose the probable disease in this patient?

- a.** *Tuberculin skin testing*
- b.** *Interferon Gamma Release Assay - IGRA*
- c.** *PCR - molecular testing*
- d.** *Sputum culture for mycobacteria*

{username}

A 24-year-old male with systolic murmur known from childhood, presents at the ER due to fever, chills and fatigue that started in the past 24 hours. About two weeks earlier he had an extensive tartar removal without prophylactic antibiotics. Examination: Fever 39°C, pulse 118, new diastolic murmur, rhonchi at lung bases. Lab: leukocytosis, elevated CRP, normal creatinine. Chest X-ray: opacities at bases.

What is the most likely diagnosis?

- a. Bilateral pneumonia*
- b. Viral myocarditis*
- c. Rheumatic fever*
- d. Infective endocarditis*

{username}

A 62-year-old male, with a history of hypertension, smoking and diabetes, arrives at the ER with complaints of dyspnea, which has been aggravating over the past week. Rules out chest pains, has not taken his temperature. Physical examination: reduced respiratory sounds in right lung base. Chest X-ray: pleural effusion on the right. Pleural puncture was performed; clear, straw-colored fluid was obtained.

Lab results are as follows:

	Protein (mg/dL)	Lactate Dehydrogenase (U/L)
Serum	6.8 (Normal 6.4-8.1)	300 (Normal 150-280)
Pleural Effusion	2.5	110

What is the most likely reason for the pleural effusion in this patient?

- a. Malignancy
- b. Tuberculosis
- c. Heart failure
- d. Pleuritis due to Rheumatoid Arthritis

100

{username}

A 58-year-old male with underlying liver cirrhosis secondary to chronic alcohol use, presents at the clinic for follow-up. Physical examination finds moderate ascites, no evidence of encephalopathy.

Lab tests are as follows:

	Creatinine (mg/dL)	Total Bilirubin (mg/dL)	Albumin (mg/dL)	Alanine aminotransferase (ALT) (U/L)	Aspartate transaminase (AST) (U/L)
Normal	0.5-1.2	0.2-1.2	3.5-5.5	8-40	8-40
	1.0	3.2	2.4	48	64

	Platelets ($\times 10^3/\mu\text{L}$)	INR
Normal	130-400	0.8-1.1
	88	1.8

Which of the following indices is included in the calculation of the Child-Pugh score for assessing the severity of the patient's disease?

- a. Blood platelet count*
- b. Blood ALT level*
- c. Blood albumin level*
- d. Blood creatinine level*

101

{username}

A 32-year-old female with fever, tiredness, loss of appetite, weight loss, joint aches, dyspnea and rash for the past few weeks visits the general practitioner asking whether clinical presentation may be consistent with systemic lupus erythematosus. Lab tests shows anemia and leukopenia.

Which of the following statements is the most correct concerning lupus?

- a. The most common pulmonary complication is pleuritis*
- b. There is no need for a urine protein test.*
- c. Fever, tiredness and weight loss do not characterize most female lupus patients.*
- d. Antibodies such as double-stranded DNA are present in most female lupus patients but are non-specific.*

102

{username}

Which of the following statements is the most correct regarding the drug Tetracycline?

- a. The drug is suitable for routine use in pregnant women with bacterial skin infections*
- b. The drug can be used safely in children under the age of 8*
- c. The drug is a relevant therapeutic option for skin and soft tissue infections caused by Staphylococcus aureus, including MRSA strains*
- d. Serious gastrointestinal side effects are rare when using the drug*

103

{username}

A 62-year-old female, normally healthy. Referred to hematologist following increase in Total Protein in serum in screening tests she had.

As part of investigation, the following tests were sent:

	Hemoglobin (g/dL)	Leukocytes ($\times 10^3/\mu\text{L}$)	Platelets ($\times 10^3/\mu\text{L}$)	Creatinine (mg/dL)	Calcium (mg/dL)	M Protein (Ig G) (g/dL)
Normal	11.5-15	4-10.8	130-400	0.5-1.2	8.4-10.2	-
	13.8	6.7	242	0.9	9.2	36

Bone marrow biopsy: 13% monoclonal plasma cells, whole body CT - no lytic lesions, no osteolytic damage.

Which of the following diagnoses is the most likely?

- a. Multiple myeloma
- b. Smoldering myeloma
- c. MGUS (Monoclonal Gammopathy of Undetermined Significance)
- d. Solitary plasmacytoma

104

{username}

A 31-year-old male presents to the doctor to get a certificate of fitness for physical activity. He reports that blood pressure values of 170/90 mmHg were measured, resistant to treatment. No abnormal findings in physical examination. Lab tests measured serum potassium concentration of 2.5 mmol/L (normal between 3.5-5.3), normal renal function.

What is the most recommended next step to investigate hypertension in this patient?

- a. Measuring fasting blood cortisol level*
- b. CT adrenals*
- c. Measuring blood renin and aldosterone levels*
- d. Urine metanephrines test*

105

{username}

A 20-year-old male, diagnosed with type 1 diabetes, treated with insulin, has not taken insulin in the past few days. He arrived at the ER now with glucose levels of 600 mg/dL.

Which of the following lab tests will most likely help differentiate between Diabetic Ketoacidosis (DKA) and Hyperglycemic Hyperosmolar State (HHS)?

- a. Blood magnesium level.*
- b. Blood bicarbonate level.*
- c. Blood phosphor level.*
- d. Blood chlorine level.*

{username}

A 35-year-old female presents at the ER due to sudden vision loss in the left eye.

In the past two years, has had intermittent fever, muscle aches and chronic fatigue. Recently, abdominal pains after eating and pains in the left hand in exertion have appeared.

Physical examination: left radial pulse not palpated, and a murmur is heard of the left subclavian artery. Blood tests show accelerated blood sedimentation and anemia. MRA of the chest and abdomen demonstrated stenoses in the aorta, subclavian artery and right renal artery.

Which of the following diagnoses is the most likely?

- a.** *Cryoglobulinemic vasculitis*
- b.** *Giant cell arteritis*
- c.** *Polyarteritis nodosa*
- d.** *Takayasu arteritis*

107

{username}

A 34-year-old female, normally healthy, presents at the clinic with bilateral edema in legs, and weight gain of 3.5 kg in the past two weeks. Reports foamy urine with no visible blood. Ruled out joint aches, rash, dyspnea or orthopnea. Background: family history of lupus (SLE). Does not take medications.

Physical examination: blood pressure 146/92 mmHg, edematous ankles, no rash or other abnormal findings.

Lab:

	Creatinine (mg/dL)	Albumin (mg/dL)	Total Cholesterol (mg/dL)
Normal	0.5-1.2	2.9-4.5	140-200
	0.9	2.1	290

Anti-Nuclear Antibody (ANA) positive in 1:160 titer

Urinalysis: protein +3, no blood.

24-hour urine collection: 5.2 g protein in 24 hours

What is the most correct next step in the management of this case?

- a.** *Start empirical steroids*
- b.** *Administration of diuretics and recommendation to reduce salt*
- c.** *Kidney biopsy*
- d.** *Treatment with Ramipril only and continue follow-up*

108

{username}

A 30-year-old male with hematuria, edemas in legs and hypertension.

Which of the following statements will most likely support a diagnosis of Acute Nephritis?

- a. Acute renal failure*
- b. Red Blood Cell (RBC) Cast*
- c. Broad Cast*
- d. Hyperlipidemia*

109

{username}

A 43-year-old male presents with confirmed biopsy diagnosis of IgA nephropathy.

He is asymptomatic, no other medical problems and does not take medications.

Physical examination including vital signs: normal.

Lab results: albumin 4.0 g/dL (normal range 2.9-4.5), creatinine 0.95 mg/dL (normal 0.5-1.2)

Urinalysis: blood +3, protein +2.

24-hour urine collection: 725 mg protein in 24 hours

What is the most correct therapeutic approach at this stage?

- a. Enalapril*
- b. Mycophenolate mofetil*
- c. Omega 3*
- d. Prednisone*

110

{username}

A 55-year-old male, presents to the ER for investigation of headaches for the past month/ His examination found no abnormal finding except for enlarged spleen, he was hospitalized for further investigation. Lab tests demonstrated:

	Hemoglobin (g/dL)	Hematocrit (%)	Leukocytes ($\times 10^3/\mu\text{L}$)	Platelets ($\times 10^3/\mu\text{L}$)
Normal	11.5-15	34-44	4-10.8	130-400
	18.3	36.7	13.8	380

In addition, Total RBC mass above norm, low Erythropoietin level, positive JAK2.

Which of the following diagnoses is the most likely?

- a. Chronic myeloid leukemia
- b. Primary myelofibrosis
- c. Polycythemia vera
- d. Smoker's polycythemia