

1

{username}

Which of the following side effects of CARBAMAZEPINE (TEGRETOL) is dose-dependent?

- a. Vertigo
- b. Stevens-Johnson syndrome
- c. Hepatic failure
- d. Pancreatitis

2

{username}

A 31-year-old female says: "Everyone talks about me on the radio – they send me messages through the songs."

What finding in the psychiatric examination is this?

- a. THOUGHT INSERTION
- b. IDEAS OF REFERENCE
- c. DELUSION OF CONTROL
- d. ILLUSION

3

{username}

A 19-year-old soldier was mildly injured about two weeks ago during a battle in which two of his comrades were killed. Since his release from the hospital, he has had difficulty falling asleep, frequently waking up due to recurring dreams about the event, and has difficulty concentrating. He describes a feeling of constant alertness, startle response to loud sounds, and avoids meeting friends from his unit or talking about what happened. He says the symptoms appeared a few days after the injury and have continued since then without significant improvement. On examination, he is conscious, alert, and appears tense but cooperative. His mood is anxious, and the affect is congruent. There is no evidence of psychosis or suicidality.

What is the most appropriate diagnosis for his condition at this stage?

- a. Post-traumatic stress disorder (PTSD)
- b. Acute Stress Disorder (ASD)
- c. Adjustment Disorder
- d. Normal stress reaction to a traumatic event

4

{username}

A 35-year-old female has been suffering from constant worry, physical tension, fatigue, and lack of concentration for about eight months. No underlying physical illnesses. Tests showed no findings indicating a physical cause for her complaints. A psychiatric evaluation shows no signs of major depression.

Which of the following options is considered first-line treatment for the disorder she is suffering from?

- a. PROPRANOLOL
- b. OLANZEPINE
- c. FLUOXETINE
- d. DIAZEPAM

5

{username}

A 30-year-old male is brought to the emergency room by his family who describe that he has been eating and drinking unusually little in recent days. During the examination, he hardly speaks, sometimes repeating a word from the sentence addressed to him. The examiner raises his hand and he remains with his hand raised and does not lower it.

What is true correct regarding his treatment in the emergency room?

- a. It should be explained to the patient that this is a panic attack.
- b. Antidepressant treatment should be initiated.
- c. A blood test should be performed to check the ceruloplasmin level.
- d. Vital signs should be monitored and benzodiazepines treatment should be initiated.

6

{username}

A patient who has been diagnosed with MAJOR DEPRESSIVE DISORDER arrives at a psychiatric clinic with his wife. According to her, since he started taking antidepressant treatment, he has been in an elevated mood, talks a lot, is restless, sleeps little, and has a noticeable increase in libido.

What medication is he most likely being treated with?

- a. VENLAFAXINE
- b. LAMOTRIGINE
- c. QUETIAPINE
- d. LITHIUM

7

{username}

Among the following psychotherapeutic methods, which is considered the most effective for treating a person suffering from Post-Traumatic Stress Disorder?

- a. Flooding
- b. Prolonged Exposure
- c. Supportive care
- d. Dialectical Behavioral Therapy

8

{username}

A 34-year-old male presents to psychotherapy following a suicide attempt after being rejected by a prestigious job. He says: "If they don't understand who I am then there's no point in me living. The world doesn't deserve me." In the next session, he blames the therapist for making him "feel miserable."

What is the most likely diagnosis?

- a. Paranoid personality disorder
- b. Narcissistic personality disorder
- c. Antisocial personality disorder
- d. Histrionic personality disorder

9

{username}

A 25-year-old student, excelling in his studies, with no previous psychiatric background, presents to the emergency room with complaints of difficulty sleeping for the past two days, mild psychomotor restlessness, and delusions of reference.

What is true about drug treatment in this condition?

- a. Initial treatment with anti-anxiety SSRIs is recommended.
- b. Initial treatment with a tricyclic antidepressant is recommended.
- c. It is recommended to begin combined treatment with benzodiazepines and an antipsychotic medication.
- d. It is very important to perform loading with Valproic Acid in the emergency room.

10

{username}

A 50-year-old male presents to the clinic with his family. He says he is sure his wife is cheating on him with several neighbors. There is no functional impairment and the psychiatric status evaluation is normal except for these thoughts. His family have tried to talk to him about it several times, but he thinks they are collaborating against him in this matter.

What is true about this disorder?

- a. The affect is impaired in this disorder.
- b. It is also common to have auditory hallucinations in this disorder.
- c. The treatment of choice for the disorder is antidepressant medications.
- d. The disorder is stable over a long period of time.

11

{username}

A 26-year-old male complains of severe anxiety while speaking in front of an audience. He experiences rapid heartbeat, sweating, trembling, dry mouth, and a feeling of choking. He knows that the reaction is excessive but he is unable to control it. He tries to avoid every time he receives a task that requires him to present to other people.

Which of the following is the most likely diagnosis?

- a. *Panic disorder*
- b. *Agoraphobia*
- c. *Specific phobia*
- d. *Social anxiety disorder*

12

{username}

What is the mechanism of action of Flumazenil?

- a. *A full agonist at the GABA-A receptor.*
- b. *A competitive antagonist at the benzodiazepine site on the GABA-A receptor.*
- c. *Partial agonist on the GABA-A receptor.*
- d. *Inverse agonist on the GABA-A receptor.*

13

{username}

A 50-year-old male was admitted to the orthopedics department after sustaining a leg fracture. On the third day of hospitalization, he developed marked agitation, anxiety, tremors, was unable to sleep, and his speech was incoherent. When asked, he denied having an alcohol problem, except for occasional social drinking. His wife reported "heavy" drinking for about four years.

Which of the following diagnoses is the most likely?

- a. Alcohol-induced dementia
- b. Alcohol-induced amnesic disorder
- c. Alcohol poisoning
- d. Alcohol withdrawal

14

{username}

A 21-year-old male presents for psychological counseling due to persistent feeling of loneliness. He describes a strong desire for interpersonal connections, but avoids initiating conversations with others out of fear of rejection. During the conversation, he speaks in a quiet voice, sometimes hesitantly, and expresses a lack of confidence in his abilities. He tends to interpret neutral comments as criticism and notes that he gave up on a job promotion for fear of not meeting expectations. He has no close friends and admits that he avoids romantic relationships out of fear of being rejected. He says that he has always had these difficulties.

What is the most likely diagnosis?

- a. Paranoid personality disorder.
- b. Schizoid personality disorder.
- c. Dependent personality disorder.
- d. Avoidant personality disorder.

15

{username}

Which of the following is an indication for the use of Leponex (Clozapine)?

- a. *Treatment of a patient with a first episode of schizophrenia without a history of pharmacologic treatment.*
- b. *Treatment of a patient with schizophrenia resistant to treatment with other antipsychotic drugs.*
- c. *Treatment of mania in a patient with bipolar disorder without psychotic symptoms.*
- d. *Treatment of generalized anxiety disorder (GAD) in patients who do not respond to SSRIs.*

16

{username}

A 28-year-old male with schizophrenia began receiving treatment with HALOPERIDOL 10 days ago. He now presented to the emergency room with a fever of 39.8°C, high blood pressure, muscle stiffness and confusion.

What laboratory finding is most common in the probable syndrome from which the patient suffers?

- a. *Hypernatremia*
- b. *Increased TSH (Thyroid Stimulating Hormone)*
- c. *Hyperglycemia*
- d. *Increased CPK (Creatinine Phosphokinase)*

17

{username}

A 35-year-old male, during a psychiatric evaluation he describes feelings of persecution and says that "the SHABAK is following me and tapping my phone." He speaks in an organized manner, with no signs of confusion or aphasia. The doctor writes in conclusion: "There is an erroneous, fixed belief system that cannot be convinced despite evidence to the contrary."

To which area of the Mental Status Examination does this finding belong?

- a. Judgment and Insight
- b. Thought process and thought content
- c. Perception
- d. Mood and Affect

18

{username}

A 28-year-old male is brought to the emergency room after sending a text message saying he "sees no point in life anymore." On examination, he appears agitated, speaks quietly, describes a deep sense of despair, and says that "if I weren't a coward, I would have already ended it." There is no evidence of drug abuse, but he notes that he has stopped taking antidepressants about a month ago.

What is the first and most important step in managing his condition?

- a. Initiation of low-dose antidepressant medication and referral for follow-up in the community
- b. Full psychiatric evaluation and blood test for medication levels
- c. Ensuring patient safety by immediately assessing suicide risk and considering hospitalization
- d. A brief supportive conversation and guidance on seeking treatment if his condition worsens

19

{username}

*In Leponex (Clozapine) treatment - which condition is considered life-threatening and requires regular monitoring through Laboratory tests?*

- a. *Hypercalcemia*
- b. *Agranulocytosis*
- c. *Thrombocytosis*
- d. *Hypoglycemia*

20

{username}

*A 9-year-old boy is brought for psychiatric evaluation due to prolonged difficulties at school. The teacher reports that the child has difficulty concentrating, tends to get up frequently, interrupts others, and sometimes answers before they have finished asking him a question.*

*At home, the parents describe similar behavior, especially when doing homework.*

*The child does not suffer from vision or hearing problems, and cognitive development is normal.*

*Which of the the following situations is required to establish a diagnosis of ADHD according to DSM-5?*

- a. *Symptoms appear after the age of 12, for at least 3 months*
- b. *The symptoms appear in at least two different situations (for example, at home and at school)*
- c. *Presence of at least four symptoms of inattention or impulsivity*
- d. *Evidence of a comorbid behavioral disorder such as ODD or Conduct Disorder*

{username}

During an examination of a patient in the gestational week 12, the following finding was observed.



What would be correct to recommend to her at this moment?

- a. Elective cervical cerclage to prevent premature birth
- b. Progestational treatment to prevent premature birth
- c. Ultrasound test for amniotic fluid quantity once every two weeks
- d. Reduction to a single fetus

22

{username}

Which of the following conditions is an absolute contraindication to performing a hysteroscopy?

- a. *Intramural myoma*
- b. *Adhesions in the uterine cavity*
- c. *Vaginal bleeding originating in the uterus*
- d. *Pelvic inflammation*

23

{username}

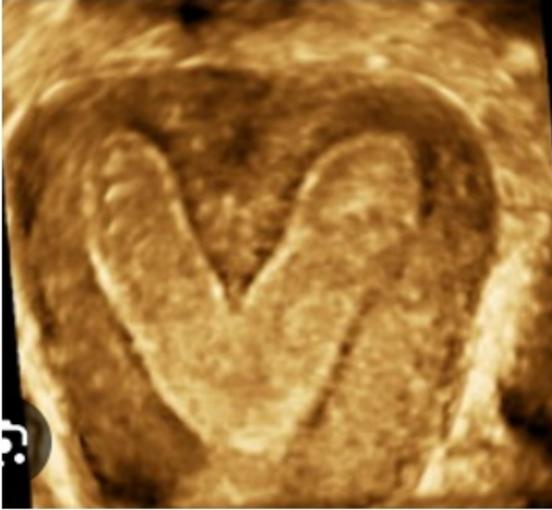
A 24-year-old female, six months after a vaginal birth. Fully breastfeeding. Wants to avoid pregnancy in the coming year.

What would you advise her?

- a. *As long as she continues to breastfeed, there is no need for additional measures*
- b. *Combined oral contraceptives*
- c. *Progestin Only Pills*
- d. *Temporary tubal ligation*

{username}

A 30-year-old female, generally healthy and without children, presents for consultation after 3 early miscarriages. A hysteroscopy demonstrated two cavities in the uterus originating at the level of the isthmus. A 3D ultrasound of the uterus is shown in the image.



What treatment should be offered to her?

- a. Conservative management without intervention
- b. Surgical hysteroscopy
- c. Laparoscopic resection of a rudimentary horn
- d. Cervical suture

25

{username}

A 36-year-old female, married + 3, gestational week 32 of her fourth pregnancy, is undergoing flow monitoring to rule out fetal anemia due to a positive indirect Coombs test. An ultrasound examination of the fetus measured a high flow velocity – PSV MCA 1.65 MOM.

What is the next step in treatment?

- a. *Immediately induce delivery*
- b. *Cordocentesis and intrauterine blood transfusion accordingly*
- c. *Repeat ultrasound examination for doppler surveillance in a week*
- d. *A targeted scan to rule out hydrops fetalis*

26

{username}

After surgery for surgical staging in the diagnosis of epithelial ovarian cancer, a positive result is obtained from neoplastic implants on the uterus.

What should case management include now?

- a. *Monitoring alone.*
- b. *Regional radiation to the pelvis*
- c. *Repeat surgery including intraperitoneal (IP) chemotherapy*
- d. *Systemic chemotherapy (IV) – Carboplatin + Paclitaxel.*

{username}

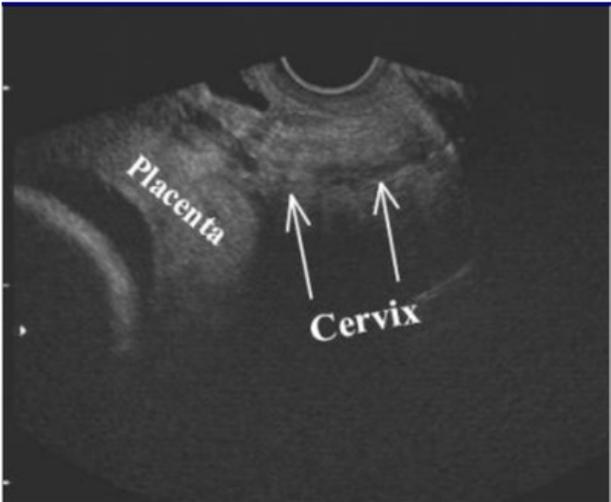
A 67-year-old female, generally healthy, seeks a repeat consultation due to stress urinary incontinence, after failure of conservative therapy. Positive cough test. Urodynamics confirms the suspicion.

Which of the following surgeries is most appropriate to offer her at this stage?

- a. Abdominal Retropubic Colpopexy
- b. Pubovaginal Slings
- c. Transobturator Midurethral Sling
- d. Artificial Sphincter

{username}

Which of the following is a risk factor for the condition shown in the following image?



- a. *Multiple pregnancy*
- b. *First pregnancy*
- c. *Uterine malformation*
- d. *Hypercoagulability*

29

A 27-year-old married woman with no children seeks counseling after 3 early miscarriages.

Which of the following tests is a significant part of the recommended workup?

- a. Urine test for STD
- b. Karyotyping for both partners
- c. Direct and indirect Coombs blood test
- d. Histological sample of the endometrium

30

{username}

A 7-year-old girl is referred for evaluation due to the appearance of thelarche. On examination – Tanner stage 3.

Which of the following tests must be part of further evaluation?

- a. BHCG level in urine
- b. Breast biopsy
- c. Brain imaging
- d. Prolactin level in the blood

31

{username}

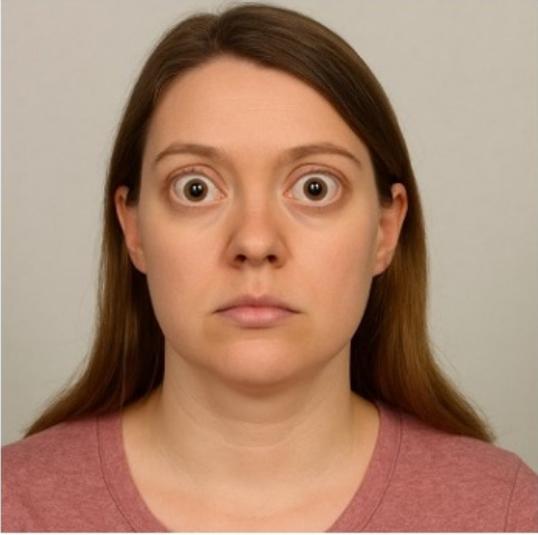
A 33-year-old female, pregnant for the second time, admitted for an elective cesarean section. The surgeon makes a Pfannenstiel incision in the lower abdomen. During the surgery, he notices slight bleeding at the lateral edge of the subcutaneous incision.

Which blood vessel is most commonly injured in this case?

- a. Superior epigastric artery
- b. Deep circumflex iliac artery
- c. Inferior epigastric artery
- d. Superficial epigastric artery

{username}

A 28-year-old female, gestational week 20, presents to the clinic with complaints of fatigue, heat intolerance, palpitations and anxiety. On physical examination, a heart rate of 110 was observed. An image of the patient is provided.



Which of the following complications is the most common in the condition from which the woman is suffering?

- a. Miscarriage
- b. Fetal thyrotoxicosis
- c. Preeclampsia
- d. Low birth weight

33

{username}

A 70-year-old female visits the clinic with new vaginal bleeding. An endometrial sample is sent for pathological examination and the following result is received – adenocarcinoma grade 1 without cytogenetic characteristics indicating high malignant potential.

What is the recommended treatment?

- a. *Laparoscopic hysterectomy and salpingo-oophorectomy + sampling of pelvic sentinel nodes*
- b. *Laparotomy with hysterectomy and salpingo-oophorectomy + dissection of pelvic sentinel nodes*
- c. *Systemic chemotherapy*
- d. *Regional radiotherapy (brachytherapy)*

34

{username}

A 30-year-old female diagnosed with GDMA2 (Gestational Diabetes), was treated during pregnancy with long-acting insulin at a dose of 18 units every evening. She gave birth to a baby boy by vaginal delivery without complications. In a check-up at the hospital the day after the delivery, her glucose levels were within the normal range.

How should she be managed postpartum?

- a. *Reduce insulin dosage by 50%*
- b. *Double the insulin dose*
- c. *Monitor glucose levels for a week and adjust treatment*
- d. *Stop insulin treatment*

35

{username}

A 29-year-old female in gestational week 14 of her first pregnancy after in vitro fertilization treatments presents to the emergency room because she does not feel fetal movements. An ultrasound in the emergency room showed a normal fetal heartbeat.

How should the case be managed?

- a. Taking a blood test for  $\beta$ -hCG level
- b. Prolonged monitoring to verify fetal heart rate
- c. Reassure the woman and explain that she should not feel fetal movements yet.
- d. Administration of Celestone

36

{username}

A 31-year-old female with a diagnosis of polycystic ovaries is scheduled for ovarian stimulation as part of an IVF protocol. In the past, a cycle was canceled due to a premature LH surge.

Which of the following interventions will reduce the risk of a premature surge in the current cycle?

- a. Adding a GnRH antagonist upon obtaining a follicle with a diameter of 13 mm
- b. Starting hCG on day 2 of the cycle
- c. Using clomifene citrate in combination with FSH
- d. Ovarian stimulation at a lower dose than the previous cycle

37

{username}

A 25-year-old female arrives at the clinic complaining of excessive vaginal discharge.

A PS examination shows copious secretion.

The doctor takes a sample from it and adds a 10% potassium hydroxide solution to it.

A fishy odor is produced.

What is the presumed diagnosis?

- a. *Trichomonas vaginalis*
- b. *Candida albicans*
- c. *Chlamydia trachomatis*
- d. Bacterial Vaginosis

38

{username}

A 28-year-old female, gestational week 16 of her second pregnancy, normal pregnancy follow-up so far, presents for a routine checkup. Two blood pressure measurements taken 4 hours apart were 151/93 and 155/91. Protein in urine is negative. Normal liver enzymes.

What is the diagnosis?

- a. Chronic hypertension
- b. Gestational HTN
- c. Normal physiological change during pregnancy
- d. Preeclampsia

{username}

A 37-year-old female arrives at gestational week 17 for a second-trimester biochemical screening test. The test results are presented in the table.

Reference	Value	Marker
0.2 – 2 MOM	0.15 MOM	<b>AFP</b>
0.15 – 3 MOM	5.8 MOM	<b>HCG</b>
>0.15 MOM	0.08 MOM	<b>uE3</b>

Which of the following diagnoses is the most likely?

- a. Trisomy 18
- b. Neural Tube Defect
- c. Trisomy 21
- d. Trisomy 13

{username}

Which of the following situations is a contraindication to the use of the device in the image?



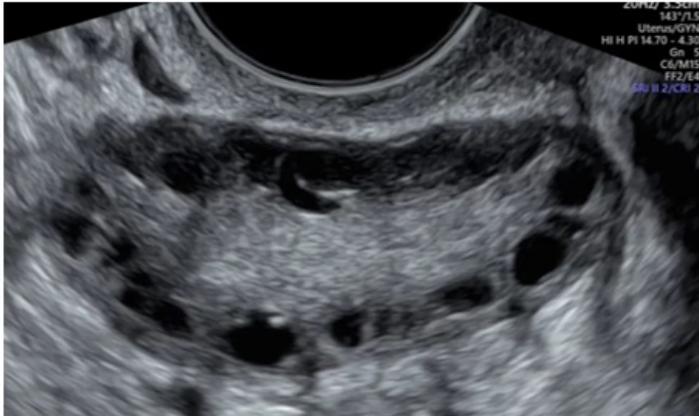
- a. Gestational age at birth under 34
- b. Birth of twins
- c. Maternal fever at birth
- d. Placental abruption

41

{username}

An 18-year-old female, generally healthy except for obesity, presents for consultation due to menstrual irregularities, 45-60/5. On examination – acne and hirsutism.

Ovarian ultrasound – attached image (polycystic ovaries).



Which of the following recommendations is the most important?

- a. Weight loss and taking combined oral contraceptives (COCs).
- b. Ovarian drilling
- c. Laser treatment for hirsutism.
- d. Fertility preservation.

42

{username}

Which of the following tests should be performed early in the pregnancy as part of an initial assessment?

- a. Liver enzymes
- b. Blood type and antibody screen
- c. Kidney functions
- d. Toxoplasma serology

{username}

*A woman in labor arrives at the hospital due to painful contractions.*

*On examination – 5 cm dilation, breech presentation.*

*In which of the following situations can the woman be allowed to have a vaginal birth?*

- a. At 26 weeks, estimated weight 900 grams, Frank Breech*
- b. At 36 weeks, estimated weight 2800 grams, Incomplete Breech*
- c. At 37 weeks, estimated weight 3200 grams, Footling Presentation*
- d. At week 38, estimated weight 3300 grams, fetal head in flexion*

{username}

A 32-year-old female, mother of 1, generally healthy, trying to conceive, presents for consultation with complaints of heavy menstrual bleeding and anemia. Diagnostic hysteroscopy demonstrates the finding in the image.



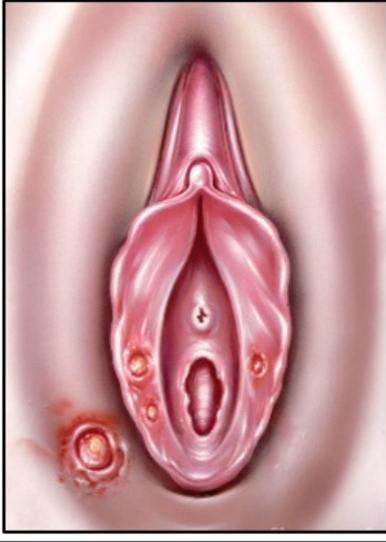
Which of the following treatments is most appropriate for her?

- a. Hysteroscopic Myomectomy
- b. Uterine Artery Embolization
- c. Magnetic resonance-guided focused ultrasound
- d. Endometrial Ablation

{username}

A 30-year-old female presents for an examination due to a lesion in her vulva, as shown in the image (Chancre; Fluorescent Treponemal Antibody-Absorption Test (FTA-ABS)- positive).

The lesion is red and painless. Regional lymph nodes are enlarged and painless. There are no systemic symptoms. Serologic testing is positive for FTA-ABS.



What treatment should be recommended for her?

- a. Excision of the lesion + lymph node sampling.
- b. Topical treatment with antibiotics + steroids.
- c. Oral Acyclovir for one week.
- d. A single intramuscular injection of high-dose penicillin G.

46

{username}

A 23-year-old female about to give birth for the first time presents to the maternity emergency room at 34.5 weeks with a complaint of premature rupture of membranes.

On examination: feels well, vital signs are normal, no fever, uterus not tender. PS - amniotic fluid is evidently clear. Normal fetal monitoring with irregular uterine activity.

Which of the following treatments can be offered to her?

- a. Tocolytic treatment
- b. Macrolide antibiotics
- c. Steroids for pulmonary maturation
- d. Magnesium for neuroprotection

47

{username}

A couple – 35 years old and 33 years old – seek further investigation into infertility. The husband's semen analysis revealed a concentration of 2 million sperm cells per ml with motility of 30%.

What is the most appropriate treatment for them?

- a. Intra Uterine Injection
- b. In Vitro Fertilization with Insemination
- c. Intra Cytoplasmatic Injection
- d. Sperm Donation

48

{username}

A 45-year-old female presents for examination due to Post Coital Bleeding.

A suspicious lesion measuring approximately 2 cm is found on the cervix and a biopsy is taken.

Pathology revealed squamous cell carcinoma.

Which of the following is required for staging of the tumor?

- a. Physical examination
- b. PET-CT
- c. Marker testing
- d. Radical hysterectomy

49

{username}

A 27-year-old female, 24 weeks into her first pregnancy. A routine examination at the clinic demonstrated a slight decrease in systolic blood pressure.

Which of the following could explain this condition?

- a. Initial stage in the development of preeclampsia
- b. A common physiological change in pregnancy
- c. Placental insufficiency and risk of developing IUGR
- d. Pressure of the uterus on the vagus nerve

{username}

A 65-year-old female visits the clinic complaining of vulvar pruritus. Visual inspection is shown in the image. Histological biopsy results of the lesion indicate hyperkeratosis, epithelial thinning with loss of papillae.



What is the recommended treatment for her?

- a. Topical treatment with testosterone ointment
- b. Topical treatment with estrogen ointment
- c. Topical treatment with high-potency steroids
- d. Wide excision of the pathological area

51

{username}

A 58-year-old male with type 2 diabetes and advanced stage 4 renal failure

Of all the following complications, which is unlikely to be found in this situation:

- a. Pericarditis
- b. Encephalopathy
- c. Neuropathy
- d. Hypotension

52

{username}

A 50-year-old male, known to have chronic lung disease, regularly treated with steroids, has a history of an anaphylactic reaction to penicillin treatment. Arrives at the emergency room due to fever and headache. On examination - fully conscious, lucid, hemodynamically stable, on neurological examination, pronounced nuchal rigidity. In spinal tap, growth of Gram-positive rods suspected to be *Listeria Monocytogenes*.

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

- a. Ampicillin
- b. Ceftriaxone
- c. Ciprofloxacin
- d. Trimetoprim-Sulfamethoxazole

53

{username}

A 50-year-old male underwent a kidney transplant eight months ago and now presents to the emergency room due to fever of 39°C. Suspicion of infection in the transplanted kidney was raised.

Which of the following pathogens is the most likely cause of this infection?

- a. *Aspergillus*
- b. *Listeria*
- c. *CMV virus*
- d. *Legionella*

54

{username}

A 62-year-old male with a history of hypertension and anterior myocardial infarction 3 years ago. Presents to the cardiology clinic due to fatigue and exertional dyspnea. On examination, BP is 110/70 mmHg, and pulse is 72 beats per minute, saturation is 95% in room air. Echocardiography demonstrated a decrease in left ventricular function with EF = 30%. He is treated with Aspirin, Atorvastatin, Enalapril and Metoprolol

What therapeutic change has been shown to improve prognosis in this patient?

- a. *Switching from Metoprolol to Propranolol*
- b. *Initiation of Digoxin treatment*
- c. *Adding Spironolactone treatment*
- d. *Switching from Aspirin to Clopidogrel*

55

{username}

A 29-year-old male with a history of regular intravenous heroin use is hospitalized with suspected bacterial endocarditis. Gram-positive cocci were found in clusters in blood cultures. Final identification and susceptibility results are still pending.

What is the most appropriate empirical treatment at this stage?

- a. Ceftriaxone only
- b. Vancomycin only
- c. Vancomycin & Gentamicin
- d. Ampicillin & Clindamycin

56

{username}

Which of the following risk factors is the most significant for developing active disease after infection with the tuberculosis bacterium?

- a. Cigarette smoking
- b. Diabetes
- c. Silicosis
- d. S/P gastrectomy

57

{username}

A 58-year-old male, with a family history of peripheral neuropathy, complains of numbness in the feet, intermittent diarrhea, and orthostatic dizziness. ECG indicates a low QRS voltage. Echocardiography demonstrated left ventricular wall thickening with preserved systolic function.

What is the most likely diagnosis?

- a. AA Amyloidosis
- b. Hypertrophic Obstructive Cardiomyopathy
- c. Hereditary transthyretin amyloidosis (hATTR)
- d. Fabry disease

58

{username}

An 82-year-old female, active and lucid. For the past month approximately, has been suffering from headaches, pain upon chewing, shoulder pain, especially in the morning, accompanied by prolonged rigidity. On her examination, there is noticeable limitation in the range of motion of the shoulders. In the lab, hemoglobin 10 g/dL (baseline values around 12 g/dL), creatinine is normal, CRP 20 (normal up to 0.5).

What imaging test may help confirm the diagnosis?

- a. PET-CT scan
- b. Temporal artery US
- c. Shoulder CT
- d. Cervical spine CT

{username}

A 65-year-old male with chronic obstructive pulmonary disease (COPD) is treated with a Long-Acting Beta Agonist (LABA) inhaler. The patient feels well without dyspnea at rest or on exertion.

CBC: 6,000 WBC/mcl, of which 350 are eosinophils. Two months later, he experiences a COPD exacerbation due to which he is hospitalized.

Legend of abbreviations:

Long-Acting Muscarinic Antagonists: LAMA

Inhaled Corticosteroids: ICS

Long-Acting Beta Agonist: LABA

What is most correct regarding continued treatment after discharge from hospitalization?

- a. The inhaler should be replaced with an inhaler containing LABA+LAMA
- b. The inhaler should be replaced with an inhaler containing ICS+LABA.
- c. The inhaler should be replaced with an inhaler containing ICS+LAMA.
- d. The inhaler should be replaced with an inhaler containing ICS+LABA+LAMA.

{username}

20 people arrive at the emergency medicine department with complaints of abdominal pain, fever, and diarrhea. An epidemiological investigation revealed that they all attended the same wedding party. A Non-Typhoid Fever infection is suspected.

What is most correct regarding drug treatment in this case?

- a. *It is mandatory to treat all cases with antibiotics (uncomplicated cases)*
- b. *Antibiotic treatment usually shortens the number of days of high fever and days of diarrhea*
- c. *Antibiotic treatment prolongs the carrier period and increases the likelihood of the disease returning*
- d. *Antibiotic treatment must continue for four weeks in any case*

{username}

A 30-year-old female has been experiencing progressive general weakness, fatigue, loss of appetite in the past month, and has lost 6 kg in weight.

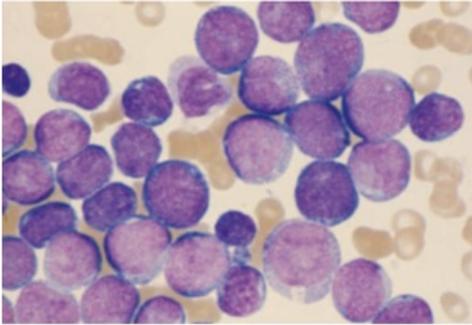
Upon admission temperature is 37.5°C, BP 120/80 mmHg, pulse 100 per minute, regular.

On physical examination: multiple hematomas over the body, enlarged lymph nodes in all stations.

In laboratory tests:

Hemoglobin 7.8 g/dl, WBC 15,000/ $\mu$ L, Platelet 65,000/ $\mu$ L

Blood smear:



What is the most likely diagnosis?

- a. Acute myeloid leukemia (AML)
- b. Myelodysplastic syndrome (MDS)
- c. Aplastic anemia
- d. Acute lymphoblastic leukemia (ALL)

62

{username}

A 45-year-old male is diagnosed with post-streptococcal glomerulonephritis (PSGN)

Which of the following conditions most likely describes the disease?

- a. The syndrome usually appears 10–21 days after streptococcal pharyngitis
- b. The primary infection is most often caused by Group B Streptococcus (GBS)
- c. In most cases, the level of complement C3 in the blood is elevated
- d. In recent years, the incidence of the disease has been on the rise

63

{username}

A 68-year-old male with a history of systolic heart failure (HFrEF, 30% ejection fraction) with underlying ischemic heart disease, well controlled on optimal therapy with Sacubitril/Valsartan, Bisoprolol, Spironolactone. No atrial fibrillation, no previous embolic events, and no evidence of intraventricular clot observed on echocardiography.

Which statement best describes the role of anticoagulant therapy in this patient?

- a. Anticoagulant therapy reduces total mortality compared to Aspirin
- b. Anticoagulant therapy is recommended for any patient with ejection fraction of the left ventricle below 35%
- c. Anticoagulant therapy does not significantly improve clinical outcomes and increases the risk of bleeding
- d. In this situation, treatment with Warfarin is preferable to new generation anticoagulants (such as DOACs)

64

{username}

A 74-year-old female with normal left ventricular function, treated for atrial fibrillation for 11 years and her condition has been stable.

For the past two months she has been complaining of dry cough and dyspnea upon exertion, no fever or edema.

Upon examination -

Heart: Regular rate, normal sounds, no murmurs. In lung auscultation, mild crepitations in the bases.

Chest x-ray shows diffuse bilateral interstitial opacities

Which of the following drugs is the most likely cause of this clinical picture?

- a. Sotalol
- b. Digoxin
- c. Amiodarone
- d. Propafenone

65

{username}

A 30-year-old male, diagnosed with Hodgkin lymphoma, began chemotherapy. A few days later, Acute Kidney Injury develops.

What pathology is most likely in this situation?

- a. Hypercalcemia
- b. Hyperphosphatemia
- c. Hypomagnesemia
- d. Hypouricemia

66

{username}

A 28-year-old female, generally healthy, presents with chronic diarrhea, abdominal swelling, and fatigue for about a year. Blood tests revealed hypochromic microcytic anemia with low ferritin levels. Serology showed high levels of IgA anti-TTG antibodies. A biopsy from the duodenum demonstrated villous atrophy and an increase in intraepithelial lymphocytes.

What is the most appropriate approach to managing the case at this stage?

- a. Wait for the HLA-DQ2/HLA-DQ8 test result before making a diagnosis
- b. The diagnosis can be determined based on the data obtained
- c. To obtain a diagnosis, a colonoscopy must be completed
- d. Serology should be repeated in 3 months and only then will the diagnosis be certain

67

{username}

A 20-year-old female with a known diagnosis of Von Willebrand disease visits her physician for preoperative preparation for a planned tooth extraction. The medical history indicates that in the past, after a tooth extraction, she suffered from prolonged and significant bleeding. No use of anticoagulant medications or other underlying diseases.

On physical examination, she is not currently bleeding, and her hemodynamic status is normal.

Which of the following treatments is recommended in preparation for the extraction process?

- a. Desmopressin
- b. Fresh frozen plasma
- c. Blood transfusion
- d. Cryoprecipitate

{username}

A 58-year-old female with rheumatoid arthritis since the age of 30 (Rheumatoid Arthritis).

Complains of abdominal pain, more in the upper left quadrant, and early satiety.

Her drug treatment includes Methotrexate and low-dose Prednisone.

On physical examination: ulnar deviation of the fingers, rheumatoid nodules on the elbows, and an enlarged spleen.

Blood test results:

- Hemoglobin: 10.8 g/dL
- White blood cell count: 2,000/μL (neutrophils 30%)
- Platelets: 210,000/μL
- High titer of Rheumatoid Factor
- Normal liver enzymes

What is the most likely etiology for the patient's clinical findings?

- a. Felty syndrome
- b. Lymphoma development
- c. Side effects of Methotrexate treatment
- d. This is a natural course of Rheumatoid Arthritis.

A 55-year-old male presents to the emergency room due to hemoptysis. In addition, for the past month he has been complaining of fatigue, joint pain, and bloody nasal discharge. Laboratory tests showed creatinine 3.5 mg/dL, whereas baseline values are around 1 mg/dL.

Imaging attached



Which of the following findings most strongly supports establishing the diagnosis?

- a. Positive ANA test at a titer of 1:320
- b. Positive Anti-Proteinase 3 (PR3) test
- c. Increased IGG4 level in the blood
- d. High ACE level

70

{username}

A 25-year-old male, has been suffering from back pain for the past 3 months. The pain wakes him up from sleep, accompanied by morning stiffness for several hours, but during the day he feels improvement. An X-ray of the lumbar spine and pelvis showed no abnormal findings.

What is the most recommended next step for case management?

- a. A pelvic MRI should be performed to confirm the diagnosis
- b. Treatment with Rituximab should be started, the diagnosis is clear
- c. If serology is positive for Rheumatoid Factor, treatment with Anti IL 17 should be initiated.
- d. Steroid treatment should be started and then Anti-TNF

71

{username}

A 42-year-old female, with no underlying diseases, recently complains of gradual weight gain, abdominal obesity, proximal muscle weakness and a tendency to develop striae on the thighs and abdomen, blood pressure 156/92 mmHg. Cushing's syndrome was suspected.

For further investigation, the following tests were performed:

Urinary free cortisol (24 hours) is elevated in 3 repeat tests

Overnight dexamethasone suppression test (1 mg) showed an increased cortisol level of 80 nmol/L at 8:00 a.m.

Low plasma ACTH level on three repeat tests

Which of the following tests is most appropriate for further investigation?

- a. MRI of the brain
- b. CRH stimulation test
- c. Inferior petrosal sinus sampling
- d. Abdominal CT to evaluate the adrenal glands

72

{username}

A 45-year-old male, truck driver. Presents to the emergency room due to severe pain in the right ankle. The pain started suddenly at night and woke him up from sleep. Upon admission, good general condition, stable, pulse 100 per minute, temperature 37.2°C. On physical examination, redness, local warmth, and significant swelling in the right ankle are accompanied by severe limitation in range of motion. Normal creatinine. A US examination of the ankle joint showed a Double Contour sign.

What is the most appropriate therapeutic step at this point?

- a. Broad-spectrum antibiotics should be initiated.
- b. Treatment with non-steroidal anti-inflammatory drugs should be initiated
- c. Methotrexate treatment should be started
- d. Combination therapy of antibiotics and Allopurinol should be initiated.

73

{username}

A 40-year-old male, no underlying diseases, with a family history of colon cancer in the father at age 65. The patient underwent a colonoscopy as a screening test. The test found several hyperplastic polyps in the sigmoid colon measuring up to 8 mm.

When is it recommended to repeat the colonoscopy?

- a. In 6 months
- b. In 3 years
- c. In 5 years
- d. In 10 years

74

{username}

A 28-year-old female, without regular drug treatment. Known Anti Phospholipid Antibodies (APLA) that were detected in investigation of past miscarriages. No personal or family history of thromboembolic events. The patient presented for routine follow-up with her family doctor.

What is most correct regarding recommendations for treatment and follow-up for this patient?

- a. *No special treatment is needed. In the next pregnancy, it is important to ensure that LMWH - Low Molecular Weight Heparin is administered at a prophylactic dose*
- b. *It is recommended to take aspirin regularly*
- c. *It is recommended to take a combination of aspirin and LMWH regularly*
- d. *It is recommended to take high-dose aspirin and Warfarin*

75

{username}

A 38-year-old female, generally healthy, was examined in the emergency room 3 nights ago due to fever and right flank pain accompanied by burning sensation during urination after two days of dysuria. A urine culture and two blood cultures were performed. The patient received intravenous Ceftriaxone and was discharged home with a recommendation for 7 days of Ciprofloxacin treatment. She is now asymptomatic.

On physical examination, vital signs and other findings are normal.

Escherichia coli bacteria were subsequently isolated from her urine culture and one blood culture, sensitive to the two aforementioned antibiotics.

What treatment is most appropriate at this stage?

- a. *Completion of oral Ciprofloxacin therapy, without the need for follow-up*
- b. *Completion of oral Ciprofloxacin therapy while monitoring blood cultures*
- c. *Oral Ciprofloxacin therapy for 3 weeks*
- d. *Reintroduction of intravenous ceftriaxone therapy*

76

{username}

A 53-year-old female presents to the emergency room due to watery diarrhea for two days, about 5 times a day. A week ago, she completed treatment with Levofloxacin, which she received for community-acquired pneumonia. No regular medications.

On examination, her temperature was 37.6°C, BP 120/70, pulse 90 per minute, regular, soft abdomen, diffuse tenderness without rebound or distention.

Laboratory: WBC 12,000/μL, normal creatinine. Stool test for *Clostridium difficile* is positive.

What will be the most appropriate treatment at this point?

- a. Intravenous Metronidazole
- b. Intravenous Vancomycin
- c. Oral Metronidazole
- d. Oral Vancomycin

77

{username}

A 32-year-old female, eight weeks into her fourth pregnancy. Three previous pregnancies ended in miscarriage at a gestational age of less than 10 weeks. About 4 hours ago she developed left hemiparesis. A brain CT scan was performed, which demonstrated an acute infarction in the area of the Right Middle Cerebral Artery.

What is the most likely diagnosis?

- a. Homozygous factor V Leiden mutation
- b. Heterozygous factor V Leiden mutation
- c. Congenital deficiency of Protein C/Protein S factors
- d. Antiphospholipid Antibody Syndrome (APS)

78

{username}

A 58-year-old male with hypertension and diabetes visits the ER due to chest pain and excessive sweating that lasted about 30 minutes, immediately afterwards, an episode of ventricular fibrillation (VF), which was treated with cardioversion.

ECG shows anterior wall ST elevations (STEMI). Immediate coronary catheterization was performed, a stent was inserted into the Left Anterior Descending Artery (LAD) with normal flow after intervention.

Echocardiography performed prior to discharge found an ejection fraction of the left ventricle (Ejection Fraction) 30%.

What is the most appropriate next management step, and why?

- a. *Due to the VF event experienced on admission, there is a clear indication for Implantable Cardioverter-Defibrillator (ICD) implantation prior to discharge*
- b. *Due to the VF event experienced on admission, an electrophysiological examination must be performed before discharge*
- c. *Give optimal treatment for heart failure, and repeat echocardiography after 6 weeks; if EF does not improve, consider ICD implantation*
- d. *Start Amiodarone load during his current hospitalization*

79

{username}

A 40-year-old male with Crohn's disease. Treated with a combination of Azathioprine and anti-TNF- $\alpha$  agents. Visits the emergency room due to severe abdominal pain and was diagnosed with acute pancreatitis.

Which of the following statements is most correct regarding the patient's condition?

- a. *This is a common side effect of anti-TNF- $\alpha$  agents, which appears after several months of treatment*
- b. *This is a dose-independent side effect of Azathioprine, which occurs in most cases in the first weeks of treatment*
- c. *Azathioprine treatment can be continued after symptoms have resolved*
- d. *The combination of anti-TNF $\alpha$  agents with Azathioprine increases the risk of this complication*

80

{username}

A 52-year-old female, with a history of asthma for the past 4 years, treated with inhaled steroids and Long-Acting Beta Agonists, presented due to repeated attacks of dyspnea upon mild exertion and a runny nose.

Laboratory tests: Blood count: 10,000 white cells per microliter, of which 12% are eosinophils (1200 cells per microliter; normal level is up to 400).

Anti-Nuclear Antibody is negative

Anti-neutrophil cytoplasmic antibodies - positive

Chest X-ray: Diffuse pulmonary infiltrates

Which of the following diagnoses is the most likely based on the data collected so far?

- a. Hypersensitivity pneumonitis
- b. Usual interstitial pneumonia with eosinophilia
- c. Eosinophilic granulomatosis with polyangiitis
- d. Chronic eosinophilic leukemia

81

{username}

A 70-year-old male with rheumatic heart disease underwent surgery to replace his mitral valve with a mechanical valve.

The patient is treated with Warfarin regularly with a target INR of 2.5–3.5.

He now presents to the emergency room due to bleeding from his gums that began suddenly. There is no other active bleeding, blood pressure and pulse are stable.

Tests: INR = 8.2, Hb = 12.8 g/dL, platelets = normal, other coagulation parameters are normal.

Which of the following is the most appropriate treatment at this stage?

- a. Discontinuation of Warfarin and administration of low-dose intravenous vitamin K
- b. Discontinuation of Warfarin and administration of Fresh Frozen Plasma (FFP)
- c. Continue Warfarin with close monitoring
- d. Discontinuation of Warfarin and administration of Prothrombin Complex Concentrate (PCC).

82

{username}

A 62-year-old male, with no chronic illnesses and no drug treatment or supplements, was referred for further investigation after hypercalcemia was found in routine blood tests. In the lab tests - Total calcium: 11.8 mg/dL (increased), PTH: 148 pg/mL (increased), Phosphorus 2.0 (low), 25(OH) Vitamin D normal, Albumin normal.

Which of the following diagnoses is the most likely?

- a. Hypercalcemia secondary to PTHrP-secreting malignancy
- b. Primary hyperparathyroidism
- c. Sarcoidosis
- d. Hyperthyroidism

83

{username}

A 40-year-old female, suffering from Systemic Lupus Erythematosus (SLE), treated with Hydroxychloroquine only. Visits the emergency room due to general weakness, joint pain, and oral sores.

In laboratory tests:

Hb: 8.8 g/dL (about six months ago it was 12 g/dL)

MCV: 86 fL

Ferritin: 350 ng/mL

Sat Transferrin: 22%

Creatinine: 1.0 mg/dL

What is the most likely diagnosis?

- a. Iron deficiency anemia
- b. Anemia of chronic kidney disease
- c. Sideroblastic anemia
- d. Anemia of chronic inflammation

{username}

A 30-year-old male, generally healthy, presents to the emergency room due to weakness and repeated vomiting for the past 5 days. Blood pressure 90/50 mmHg, pulse 100/min – regular, temperature 36.7°C. Physical examination: conjunctival jaundice, abdominal tenderness.

Laboratory results:

Hb = 13 g/dL, WBC = 3500, PLT = 110,000, AST = 4500, ALT = 5500

Bilirubin = 20 mg/dL.

Which of the following parameters would most significantly assist in assessing the synthetic capacity of the liver in this patient?

- a. Blood ammonia level
- b. Factor VII level
- c. Factor VIII level
- d. Blood glucose level

{username}

An 82-year-old female, diagnosed with Rheumatoid Arthritis. Treated with Methotrexate. During a visit to the clinic she reports improvement in pain in the MCPs (Metacarpal Phalangeal Joints), but complains of pain in the Distal Interphalangeal Joints, and on physical examination, the following findings are found – see image.



What is most correct concerning her condition?

- a. This is a failure of methotrexate treatment; it is recommended to consider biologic therapy.
- b. This is not Rheumatoid Arthritis, but Psoriatic Arthritis.
- c. This is Osteoarthritis in addition to Rheumatoid Arthritis.
- d. It is recommended to switch to Plaquenil treatment.

86

{username}

A 76-year-old female presents to the emergency room due to sharp anterior chest pain accompanied by dyspnea, which began on the morning of her visit, following the sudden death of her husband. In the background, hypertension that is treated with Lercandipine.

In examination, hemodynamically stable, saturation is 98% in room air. On cardiac auscultation, a fourth heart sound is heard. The rest of the examination is normal.

In the ECG diagram, ST elevations in the anterior leads.

High troponin level in two tests performed

Echocardiography shows apical hypokinesia, left ventricular ejection fraction LVEF 35%.

Coronary catheterization demonstrated normal coronary arteries.

What is the most likely diagnosis in this case?

- a. Aortic dissection
- b. Acute perimyocarditis
- c. Pulmonary embolism
- d. Takotsubo cardiomyopathy

87

{username}

An 81-year-old male, active and lucid, with no symptoms and no pathological findings on physical examination.

Referred for further investigation after a routine blood test found WBC 25,000/ $\mu$ L Lymphocytes 10,000/ $\mu$ L

Similar tests conducted over the past six months showed similar findings. The rest of the laboratory tests are normal.

Flow cytometry demonstrated a monoclonal population of B lymphocytes consistent with the diagnosis of Chronic Lymphocytic Leukemia (CLL).

What is the most appropriate therapeutic approach to managing the case at this stage?

- a. Starting treatment with Lenalidomide (immune therapy)
- b. Monitoring only, no treatment at this time
- c. Starting steroid treatment
- d. Starting treatment with Venetoclax (BCL2 inhibitor)

88

{username}

A 28-year-old female with a history of childhood asthma is treated with an inhaler containing inhaled corticosteroids regularly, and short-acting beta-agonist bronchodilators as needed.

She goes to her doctor and tells him that she is 8 weeks pregnant, that her pregnancy has been normal so far, and asks about asthma management during pregnancy, and the significance of the disease in the context of treatment.

Which of the following sentences is the most correct?

- a. Asthma usually improves during pregnancy, so it is usually safe to stop treatment
- b. Inhalers containing beta-agonists should not be used during pregnancy, but treatment with corticosteroids alone can be continued.
- c. Inhaled corticosteroids and beta-agonist bronchodilators are safe in pregnancy
- d. Anti-IL5 biologic therapy for eosinophilic asthma in pregnancy is preferable, as the drug is more potent and significantly safer than inhalers.

89

{username}

A 68-year-old male presents to the emergency room due to fever, cough, and increasing dyspnea for the past five days. In the background: diabetes, hypertension and obesity. (BMI = 33)

On examination - fever 38°C, saturation 88% in room air, respiratory rate 26 per minute.

Chest x-ray demonstrates diffuse bilateral infiltrates.

Blood tests: CRP = 160 mg/L

D-dimer = 1.2 µg/mL

Tested positive for SARS-CoV-2

Which of the following risk factors is the most significant for mortality in this patient?

- a. Increased CRP level
- b. Obesity (BMI > 30)
- c. Age over 65 years
- d. Elevated D-dimer

90

{username}

*Below are the results of the pulmonary function tests:*

*Forced Expiratory Volume 1<sup>st</sup> second (FEV1): 35%*

*Forced Vital Capacity (FVC): 65%*

*FEV1/FVC: 0.5*

*Total lung capacity: 120%*

*Residual Volume: 220%*

*Diffusion Capacity of Carbon Monoxide: 50%*

*Which of the following patients is the most likely to have these results?*

- a. *This represents a healthy athlete, without lung disease*
- b. *This represents a heavy smoker with significant emphysema*
- c. *This represents a patient with muscle weakness due to myasthenia gravis*
- d. *This represents a patient with Idiopathic Pulmonary Fibrosis (IPF)*

91

{username}

*A 47-year-old male, with no known underlying diseases, was hospitalized due to confusion, headaches, and repeated vomiting over the past 24 hours. On physical examination: conscious, hemodynamically stable, with no abnormal neurological findings.*

*Laboratory: Plasma sodium: 109 mmol/liter, plasma osmolarity: 260 mOsm/kg, glucose level: normal.*

*The patient was treated with an infusion of hypertonic sodium solution (3%). After 24 hours, the sodium level rose to 127 mmol/liter.*

*The next day, speech disturbances, dysphagia, and decreased consciousness developed.*

*Which of the following diagnoses is most likely?*

- a. *Acute Cerebral Ischemic Event*
- b. *Intra Cranial Hemorrhage*
- c. *Cerebral Edema*
- d. *Osmotic Demyelination Syndrome*

92

{username}

A 42-year-old male is being followed-up for chronic hepatitis B. The patient is asymptomatic with no clinical findings suspicious of cirrhosis.

Which of the following laboratory findings is the most significant predictor of cirrhosis?

- a. Positive anti-HBs
- b. Negative HBeAg
- c. High serum HBV DNA levels
- d. High levels of inflammatory markers

93

{username}

A 43-year-old female, with a history of scleroderma. Complains of dyspnea upon mild exertion for the past six months, without change. She undergoes an echocardiogram which demonstrates normal cardiac function and no elevated pulmonary blood pressure. A chest CT scan is performed, which demonstrates "GROUND GLASS OPACITIES".

Respiratory function findings:

Forced Expiratory Volume in first second (FEV1): 70%

Forced vital capacity (FVC): 60%

FEV1/FVC = 0.9

Which treatment is most appropriate?

- a. Bronchodilators with inhaled steroids
- b. High-dose systemic steroids
- c. Vasodilators
- d. Mycophenolate

{username}

A 76-year-old male with type 2 diabetes, hospitalized due to gradual decline in level of consciousness, confusion, and general weakness for the past 3 days. His family reports general weakness, reduced hydration, and increasing confusion. He has not been taking insulin for a week.

On examination: Confused, BP: 90/58 mmHg, Pulse: 116, Temperature: 36.5°C, 18 breaths per minute

Dry skin, poor turgor, no focal neurological signs.

Lab tests:

Glucose (mg/dl)	Creatinine (mg/dl)	BUN (mg/dl)	HCO <sub>3</sub> (mEq/L)	PH	K (mEq/L)	Na (mEq/L)
850	2.6	64	21	7.36	4.9	142

Serum ketones test is negative

Two hours after starting an infusion of 0.9% NaCl at a rate of 1 liter per hour, the patient appears slightly more alert, but still fatigued. Glucose dropped to 560.

What is the most recommended treatment step at this point?

- Initiate low-dose IV insulin while monitoring potassium
- Transfer fluids to a hypotonic solution (0.45% NaCl)
- Immediate administration of intravenous potassium
- Intravenous bicarbonate administration

95

{username}

A 40-year-old male was admitted to the emergency room for evaluation of Pre-renal Acute Kidney Injury.

What laboratory finding is most likely to be found in this situation?

- a. Low uric acid level in the blood
- b. Abnormal sodium levels
- c. BUN/Creatinine ratio (BUN/Cr) less than 10
- d. Blood eosinophilia

96

{username}

A 77-year-old female is hospitalized due to decompensated heart failure. A urinary catheter is placed to monitor hourly urine output, and she also receives intravenous diuretics. The medical history is significant for untreated hypertension and urinary incontinence. She is receiving treatment with Carvedilol, Furosemide, Ramipril.

On physical examination, blood pressure is 154/92 mmHg, heart rate is 100/min, and respiratory rate is 18/min.

Cardiopulmonary examination revealed bibasilar crackles and S3. In the lower extremities, bilateral pitting edema at the mid-calf level.

Which of the following actions is most recommended for preventing urinary tract infection?

- a. Administering prophylactic trimethoprim-sulfamethoxazole
- b. Urine test and urine culture on the third day of catheterization
- c. Urinary catheter removal
- d. Replacing the urinary catheter with an antiseptic-coated catheter.

97

{username}

A 68-year-old female with chronic atrial fibrillation. Treated with Apixaban.

What is the mechanism of action of the drug?

- a. Direct inhibition of Thrombin (Factor IIa)
- b. Direct inhibition of Factor Xa
- c. Inhibition of platelet aggregation through blocking ADP receptors
- d. Increasing the activity of Anti-thrombin III

98

{username}

A 63-year-old male with a background of ischemic heart disease, hypertension, and diabetes. No complaints at all. Scheduled for cataract surgery, undergoes a chest x-ray before surgery which shows "calcified pleural plaques, lung fields without abnormal findings." The patient does not have any respiratory symptoms.

What is the most precise clinical significance of these findings?

- a. It is most likely calcification secondary to atherosclerosis.
- b. Likely past asbestos exposure
- c. It is likely that this is a past pneumonia due to CMV infection.
- d. This is highly likely a pulmonary malignancy.

{username}

A 51-year-old female with underlying ischemic heart disease, treated with aspirin. She presents to the emergency room due to black stools for the past two days. On examination: in good general condition, normal vital signs, evidence of melena on rectal examination. Hemoglobin 10 g/dL (baseline is 12 g/dL). Aspirin was discontinued and intravenous Proton Pump Inhibitor (PPI) therapy was initiated. A gastroscopy performed the next day revealed a Forrest III gastric ulcer with no other findings.

What is the most appropriate approach to further managing the case?

- a. Discharge with oral PPI therapy and permanent aspirin discontinuation
- b. Discharge with oral PPI therapy and resumption of aspirin
- c. Continued hospitalization with intravenous PPI for 5 days
- d. Continued hospitalization with switch to oral PPI for 3 additional days

100

{username}

A 83-year-old female with a history of hypertension and type 2 diabetes has been recently complaining of dizziness and dyspnea. A heart rate test detects 40 beats per minute.

Which of the following findings most strongly supports the need for a permanent pacemaker implantation as soon as possible?

- a. Systolic murmur
- b. Diminished second heart sound
- c. Pulsus Paradoxus
- d. Prominent A waves in the jugular veins

101

{username}

Which of the following findings constitutes the most specific and reliable diagnostic criterion for establishing a diagnosis of diabetes?

- a. The appearance of clinical symptoms of diabetes with a random glucose level of above 200 mg/dL
- b. HbA1c above 6.8%
- c. Fasting glucose level (FPG) above 140 mg/dL
- d. Glucose level two hours after oral glucose load – above 180 mg/dL

102

{username}

A 50-year-old male, with obesity, hypertension and hyperlipidemia. Complains of daytime drowsiness, including an incident of falling asleep while driving. Undergoes a sleep study which shows 46 apneas per hour.

What is the most appropriate treatment?

- a. Benzodiazepines
- b. Phrenic Nerve Stimulation
- c. Continuous Positive Airway Pressure
- d. Oxygen Pressure Chamber

103

{username}

A 54-year-old male is hospitalized due to fatigue, loss of appetite and confusion over the past 48 hours.

On examination – normal vital signs, decreased alertness, myoclonic tremor, no focal neurological deficit.

Laboratory results –

Urea: 196 milligrams/dL (normal up to 43), creatinine: 8.4 milligrams/dL (normal up to 1.1)

Normal electrolyte levels

What is the most appropriate next step in managing the case?

- a. Intravenous fluids and monitoring only
- b. Initiation of urgent dialysis
- c. Urgent lumbar puncture
- d. Empirical antibiotic therapy

104

{username}

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

Which finding would most likely support the diagnosis of Acute Nephritis?

- a. Acute Renal Failure
- b. Red Blood Cell (RBC) Cast
- c. Broad Cast
- d. Hyperlipidemia

105

{username}

A 62-year-old male with hypertension and hyperlipidemia visits the ER due to pressure-like substernal chest pain for the past two hours. At first the pain appeared after climbing a few upstairs, but in the past hour also continued at rest. Not radiating to the back or jaw, no nausea or sweating. ECG shows normal sinus rhythm with no new ischemic changes, and normal troponin values.

Which of the following diagnoses is most likely?

- a. Acute myocardial infarction (NSTEMI)
- b. Unstable angina
- c. Stable angina
- d. Musculoskeletal chest pain

106

{username}

A 32-year-old female, presents to the emergency room due to fever, rash, abdominal pain, conjunctival jaundice. During her stay in the emergency room, her condition deteriorates with confusion and drowsiness. In the laboratory – hemoglobin 6 g/dl, normal leukocytes, platelets 30,000, creatinine 2.7 mg/dL (normal baseline values).

What is the most likely diagnosis?

- a. Thrombotic Thrombocytopenic Purpura
- b. Immune Thrombocytopenic Purpura
- c. Acute Myeloid Leukemia
- d. Chronic Lymphocytic Leukemia

{username}

A 50-year-old female, with a known diagnosis of hypothyroidism, is regularly treated with Eltroxin 100 micrograms per day, has been non-adherent to therapy for approximately one month. She has now been admitted to the emergency room unconscious and suffering from seizures.

In blood tests TSH=100 mIU/L

Given her clinical condition, Myxedema Coma is suspected.

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

- a. Mortality rate ranges from 20–40% despite maximum treatment
- b. Prognosis depends on TSH and T4 levels at admission
- c. Giving hypotonic saline infusion is an important part of treatment
- d. Most cases occur in young people

{username}

A 72-year-old male, without significant underlying diseases and not taking chronic medications, undergoes an evaluation before elective shoulder surgery. Physical examination shows a slow and regular pulse. He is asymptomatic without dizziness or loss of consciousness.

The following is the diagram of the ECG performed:



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

- a. Calming the patient and continuing planning shoulder surgery as usual
- b. Intravenous atropine administration and follow-up
- c. Permanent pacemaker implantation
- d. Carrying out pre-operative coronary angiography

109

{username}

A 48-year-old female with a history of systemic scleroderma. Complains of difficulty swallowing and a "burning" sensation in the chest.

Which of the following findings is the most typical in esophageal manometry?

- a. Increased distal esophageal peristalsis and increased tone in the Lower Esophageal Sphincter (LES)
- b. Diffuse esophageal spasm and increased LES tone
- c. Decreased distal esophageal peristalsis and LES dysfunction
- d. Increased esophageal peristalsis in the presence of poor LES tone

110

{username}

A 76-year-old female presents to the emergency room with complaints of progressive dyspnea, a dry cough for 3 weeks and an unintentional weight loss of about 4 kg in 3 months. Smoking history of 50 pack-years.

On examination: normal temperature, blood pressure 122/64 mmHg with a decrease of 24 mmHg in systolic pressure on inhalation, pulse 110/min, saturation 90% in room air. Prominent jugular venous congestion, distant heart sounds, crackles at the lung bases.

Chest X-ray: A space-occupying lesion in the right upper lobe with a diameter of 6 cm, enlargement of the cardiac silhouette.

Which of the following tests is most recommended to advance diagnosis and treatment at this stage?

- a. Cardiac Catheterization
- b. CT-guided biopsy
- c. Fiberoptic bronchoscopy
- d. Transthoracic echocardiography