{username}

A 25-year-old male diagnosed with schizophrenia is admitted to the emergency department. The psychiatrist observes that when she raises her hand, the patient also raises his hand. This is repeated several times.

What phenomenon is this?

- **1.** Echopraxia
- **2.** Catalepsy
- **3.** Posturing
- **4.** Waxy-flexibility

2

{username}

Which of the following antipsychotic medications can be administered as a long-acting intramuscular (IM) injection for the treatment of schizophrenia?

- 1. CLOZAPINE (LEPONEX)
- **2.** RISPERIDONE (RISPERDAL)
- **3.** QUETIAPINE (SEROQUEL)
- **4.** ZIPRASIDONE (GEODON)

{username}

Which of the following medicines is most likely to cause a worsening in cognitive function in the elderly?

- **1.** FLUOXETINE
- **2.** CITALOPRAM
- **3.** ESCITALOPRAM
- **4.** PAROXETINE

4

{username}

Which of the following is true regarding Bulimia Nervosa?

- **1.** Usually associated with a BMI <16.5
- **2.** Equal gender distribution
- **3.** Around half of the patients have had a prior episode of Anorexia Nervosa
- **4.** Significant concern regarding being thin

{username}

At the clinic examination, the patient says:

"I was observing freedom at the beach, a swan flew into the sky, the sun is red." Which part of the psychiatric status does the disorder belong to?

- **1.** Affect
- **2.** Thought process
- **3.** Thought content
- **4.** Perception

6

{username}

A 51-year-old male was hospitalized about a decade ago after hitting his wife.

At that time, he expressed concerns that his wife was having an affair. He described following her and identifying signs of her being unfaithful. He asked her questions about this repeatedly, including waking her up in the middle of the night, and despite her denying it, he insisted that his suspicions are true. He reported no changes in sleep or appetite, functioned well at work, engaged in physical activity, and was a good father to his children. He was treated medicinally and, even after 10 years, continues to believe in his wife's infidelity. He remains functional in other aspects of life.

Which disorder is the most likely diagnosis in this case?

- **1.** Depressive Disorder with Psychotic Symptoms
- 2. Social Anxiety Disorder
- **3.** Bipolar Disorder
- **4.** Delusional Disorder

{username}

Which of the following treatments is <u>most recommended</u> for managing HALLUCINOGEN PERSISTENT PERCEPTION DISORDER (HPPD)?

- **1.** CLONAZEPAM
- **2.** LITHIUM
- **3.** ALPRAZOLAM
- **4.** FLUOXETINE

8

{username}

All of the following disorders are included in the OCD and Related Disorders chapter of the DSM-5, <u>except for</u>:

- **1.** Body Dysmorphic Disorder
- **2.** Hoarding Disorder
- **3.** Trichotillomania
- **4.** Obsessive Compulsive Personality Disorder

{username}

All of the following are true regarding Hoarding Disorder, except for:

- The behavioral drive is anxiety about losing objects the patient believes they will need in the future
- **2.** There is a distorted belief or emotional attachment regarding the hoarded objects
- **3.** Most hoarders understand that their behavior is problematic
- **4.** The disorder is considered a psychotic disorder on the schizophrenia spectrum

10

{username}

Which of the following medications also acts as a partial agonist at the dopamine receptor 2 (D2)?

- **1.** HALOPERIDOL
- **2.** ARIPIPRAZOLE
- **3.** CLOZAPINE
- **4.** RISPERIDONE

11

{username}

All of the following could cause Central Hyperthermia, except for:

- **1.** Poisoning from Tri-Cyclic Antidepressants (TCA)
- **2.** Neuroleptic Malignant Syndrome (NMS)
- **3.** Lead poisoning
- **4.** Oral Clonazepam overdose

{username}

Which of the following clinical characteristics is more consistent with pseudo-dementia than Alzheimer's disease?

- **1.** The patient makes an effort to answer questions correctly
- **2.** The patient complains a lot about forgetfulness
- **3.** The family have not noticed changes
- **4.** The cognitive difficulties arise more during the evening

13

{username}

Which of the following sentences is most correct regarding sexual abuse?

- 1. It does not exist in the history of patients diagnosed with Dissociative Identity Disorder
- **2.** It does not increase the risk of suicide under the age of 18
- 3. In around 25% of the cases there is a link to the development of schizophrenia
- **4.** There is occasionally a history in those who have been diagnosed with Bulimia Nervosa.

14

{username}

Which of the following most correctly describes autistic spectrum disorder in children?

- **1.** Development of a language problem is very rare
- **2.** The appearance of febrile seizures rules out the diagnosis
- **3.** Frequent occurrence of sleep disorders (Insomnia)
- **4.** Low frequency of gastrointestinal disorders

{username}

A 32-year-old female with a history of Type 1 Bipolar Disorder presents to the emergency department with vomiting, abdominal pain, diarrhea, severe tremors, and dysarthria. Which of the following diagnoses is most likely in this case?

- **1.** Hypothyroidism
- **2.** Neuroleptic Malignant Syndrome
- **3.** Lithium Toxicity
- 4. Akathisia

16

{username}

A 40-year-old male with acrophobia (fear of heights) begins psychotherapy. He was instructed to create a table documenting anxiety episodes, including four columns: 1. Date and time 2. Triggering situation 3. Automatic thoughts 4. Emotional response.

Which type of psychotherapy is most likely being used?

- **1.** Psychodynamic Therapy
- **2.** Cognitive Behavioral Therapy
- **3.** Dialectical Behavior Therapy
- **4.** Psychodrama

{username}

A 34-year-old male has been claiming for the past six months that his neighbors are aliens and blames them for planting thoughts in his brain. On examination, there is no evidence of auditory hallucinations, but he reports distress due to the actions of the neighbors. He has significant functional impairment at work and within his family.

All of the following symptoms support a diagnosis of DELUSIONAL DISORDER, except for:

- **1.** Type of delusions he is manifesting
- **2.** The time frame since onset of the symptoms
- **3.** The absence of auditory hallucinations
- **4.** Functional limitation

18

{username}

A 42-year-old male with schizophrenia. In recent years he has been treated with CLOZAPINE, without improvement. He presents to the emergency department with chest pain, shortness of breath, and fever.

Which of the following tests is <u>least significant</u> in advancing the diagnosis at this stage?

- 1. CPK-MB
- **2.** Troponin levels
- **3.** Clozapine level
- **4.** CBC

{username}

Which of the following statements is true regarding Neuroleptic Malignant Syndrome (NMS)?

- 1. It usually appears within 6-12 hours of starting treatment with antipsychotic medications
- **2.** It appears in approximately 30% of patients receiving antipsychotic medications
- **3.** The mortality risk is relatively low no more than 5% of cases
- **4.** It appears more frequently in men than women

20

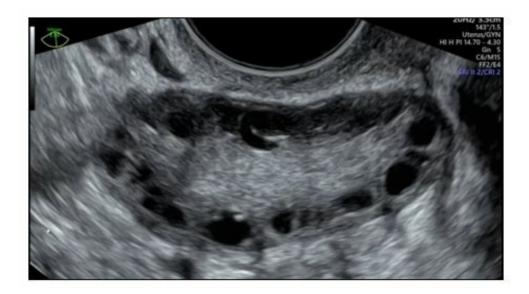
{username}

What is correct regarding the treatment of Generalized Anxiety Disorder?

- **1.** Tricyclic medications are not effective
- **2.** Beta blockers are considered to be a first-line treatment
- **3.** Antihistamines are not effective
- **4.** Psychotherapy in the form of Cognitive Behavioral Therapy (CBT) is recommended.

{username}

A 22-year-old single woman, usually healthy, presents with complaints of irregular menstrual cycles, acne, and hirsutism. On the gynecological ultrasound, the following picture was observed.



What is the most suitable treatment for her condition?

- **1.** Combined oral contraceptives
- **2.** Progesterone-only pills
- **3.** Ovarian drilling
- **4.** Ovarian cystectomy

{username}

A 45-year-old patient, usually healthy and mother of three, comes for consultation due to the result of a routine PAP test showing ASC-US (Atypical Squamous Cells of Undetermined Significance).

What is the correct recommendation for her?

- **1.** Repeat PAP test in two years
- **2.** HPV Typing test
- **3.** Conization
- **4.** Hysterectomy

23

{username}

During hysterectomy, the senior surgeon decides to perform an subtotal procedure, and leave the cervix in the pelvis.

Which of the following reasons, given by the senior surgeon to the intern, justifies his decision and proves it to be right?

- **1.** Prevention of pelvic organ prolapse in the future
- **2.** Maintenance of the integrity of the vagina and enjoyment of sexual intercourse
- **3.** Maintenance of normal functioning of the bladder
- **4.** Surgical difficulty in dissection of the cervix due to an anatomical deformity following an old pelvic infection

{username}

A 35-year-old female has been taking oral contraceptives for about 10 years. Her mother recently passed away from a malignancy of unknown origin, and she is seeking consultation regarding the risk of developing malignancy.

Which of the following statements regarding the link between prolonged use of contraceptives and cancer is true?

- **1.** It reduces the risk of cervical cancer
- **2.** It reduces the risk of ovarian cancer
- **3.** It increases the risk of endometrial cancer
- **4.** It increases the risk of colorectal cancer

25

{username}

During laparoscopic surgery for ovarian torsion, severe hemorrhage occurred while inserting the lower right trocar.

Which blood vessel is the most likely source of the hemorrhage?

- **1.** Deep circumflex artery
- **2.** Inferior epigastric artery
- **3.** Femoral artery
- **4.** Uterine artery

{username}

A 28-year-old female, in week 33 of her first pregnancy, is hospitalized for supervision after being involved in a road traffic accident, and sustaining blunt abdominal trauma. Around 5 hours after the accident, she begins to complain of abdominal pain. On uterine monitoring, regular and frequent low-amplitude contractions are recorded.

What is the most likely diagnosis?

- **1.** Early delivery
- **2.** Placental abruption
- **3.** Premature rupture of membranes
- **4.** Uterine rupture

27

{username}

A 62-year-old woman goes to the clinic with symptoms of urinary frequency and urgency. The patient describes urine leakage before she manages to get to the toilet. Urine test and urine culture are normal. A urodynamic test indicates involuntary contraction of the detrusor muscle.

What is the first-line treatment in this case?

- **1.** Bladder training and physiotherapy of the pelvic floor
- **2.** Anticholinergic/antimuscarinic medication
- **3.** Sacral Neuromodulation
- **4.** Mid-urethral sling Tension-free Vaginal Tape Obturator (TVT/O)

{username}

A patient in gestational week 30 starts chemotherapy for breast cancer. Which of the pregnancy complications could occur as a result of the chemotherapy?

- **1.** Intra-uterine growth restriction
- **2.** Cleft palate
- **3.** Hypertension
- **4.** Oligohydramnios (low amniotic fluid)

29

{username}

A 29-year-old female, in week 29 of her second pregnancy, is hospitalized due to a fever, burning during urination, and hip pain.

After taking a urine culture, treatment was started with parenteral antibiotics (intravenous).

When is it possible to switch oral treatment?

- **1.** Seven days after treatment while hospitalized
- **2.** After receiving the result of the urine culture test with the type of bacterium and the sensitivity
- **3.** After receiving a sterile urine culture test result
- **4.** After 48 hours without a fever

{username}

A patient underwent an early screening for fetal anomalies, which identified a defect presented in the image.



What is expected to be found in the results of her second trimester biochemical screening?

- **1.** Elevated Alpha Fetoprotein (AFP)
- **2.** Low Alpha Fetoprotein (AFP)
- **3.** Elevated Estriol (E3)
- **4.** Low Estriol (E3)

{username}

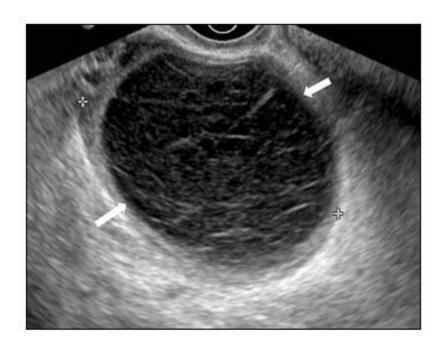
A 30-year-old female patient arrived for a consultation due to a non-painful ulcer in the genital area. She has recently started a new relationship, and is having unprotected sexual relations. On examination - an ulcer of about 2 cm on the left labia majora + enlargement of an inguinal lymph node on the left. On microscopic examination (dark field), spirochetes were identified.

What is the recommended treatment?

- **1.** IM Ceftriaxone 250mg once
- **2.** IM Benzathine Penicillin G 2.4 million units once
- **3.** IV Vancomycin 1 gram x 1/day for 3 days
- **4.** Clindamycin cream 2% 5 gram Locally for 7 days

{username}

A 24-year-old woman, generally healthy, arrives to the ER due to acute lower abdominal pain on the left side after having sexual intercourse. Last menstrual period was 3 weeks ago. On examination, her blood pressure is 115/65 mmHg, pulse is 85 bpm, and her temperature is normal. Pelvic ultrasound shows a 7 cm ovarian cyst with a small amount of fluid in the Douglas space and no signs of ovarian torsion.



What is the recommended treatment in this case?

- **1.** Analgesics and hemodynamic monitoring
- **2.** Percutaneous drainage of the cyst under ultrasound guidance
- **3.** Transvaginal cyst drainage
- **4.** Urgent laparoscopy to remove the cyst

{username}

A post-partum woman arrives to the ER 5 days after a Caesarian section, complaining of a fever, redness, and green discharge emanating from the surgical scar.

On examination, the scar is swollen and hard, and significantly sensitive upon palpation. On the ultrasound - subcutaneous collection.

Which of the following treatments is the most recommended?

- **1.** US-guided percutaneous drainage
- **2.** Disinfection of the scar with Polydine, and oral antibiotic treatment
- Opening of the scar and drainage, examination of the integrity of the fascia, and administration of intravenous antibiotics.
- **4.** Surgery for debridement of the scar, examination and irrigation of the pelvis, and reclosure of the fascia.

34

{username}

During laparoscopic hysterectomy, a 2 cm injury was identified in the bladder dome, with visible urine leakage.

What is the most correct recommendation in this case?

- **1.** Supervision alone; spontaneous healing of the rupture is expected
- **2.** Repair in two layers, with placement of a urinary catheter for 7 days
- **3.** Switch to laparotomy and perform detailed screening of pelvic organs
- **4.** Repair using non-absorbable sutures and administer broader-spectrum antibiotics

{username}

A 27-year-old female, in week 10 of her first pregnancy, suffers from lupus and is treated with corticosteroids and Plaquenil.

What complication of the medication could occur during the pregnancy?

- **1.** Premature delivery
- **2.** Intra-uterine growth restriction
- **3.** Gestational diabetes
- **4.** Oligohydramnios (low amniotic fluid)

36

{username}

Which of the following is a risk factor for the development of uterine fibroids?

- **1.** Young age
- **2.** Late menarche
- **3.** Smoking
- **4.** Obesity

{username}

A female patient arrived after learning she is pregnant. In the background - regular menstrual cycle, with the last menstrual period being 6 weeks ago. An ultrasound examination shows the gestational sac in normal location of the uterus, fetal pole without a pulse, CRL=5mm.

What would be correct to recommend her at this moment?

- **1.** Another examination in a week
- **2.** Daily monitoring of the pregnancy hormone in the blood
- **3.** A referral to pregnancy termination committee
- **4.** Dilation and curettage procedure in the operating room

38

{username}

Which of the following tests could detect pregnancy at the earliest stage?

- **1.** Home pregnancy test
- **2.** Serum pregnancy test
- **3.** Urine pregnancy test
- **4.** Pelvic ultrasound examination

{username}

A 38-year-old female, married, mother of 3. In the past two pregnancies she delivered early, in week 34, due to severe preeclampsia.

What would the treatment recommendation include for her for the rest of her life in order to reduce her elevated risk of cardiovascular diseases?

- **1.** Treatment with statins
- **2.** A low sugar diet
- **3.** Treatment with aspirin
- **4.** Maintaining a normal body weight

40

{username}

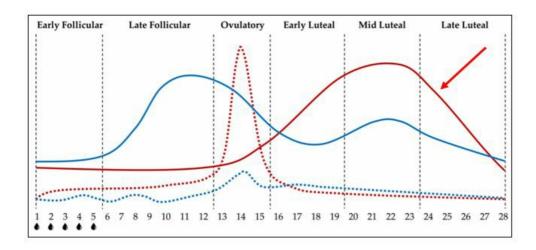
A 52-year-old female, arrived for consultation complaining of hot flashes and insomnia for about two years that have severely affected her quality of life. She underwent a complete hysterectomy at the age of 45 due to uterine fibroids and menometrorrhagia.

Which of the following medications is recommended as a treatment for her condition?

- **1.** Estrogen
- **2.** Progesterone
- **3.** Testosterone
- **4.** Tibolone

{username}

The graph provided illustrates hormone levels during the menstrual cycle.



Which of the following hormones fits the graph marked with the arrow?

- **1.** Estradiol
- **2.** Progesterone
- **3.** FSH
- **4.** Inhibin A

{username}

A 35-year-old female, usually healthy, in week 33 of her third pregnancy, arrived to the ER due to epigastric abdominal pain that radiates to the back, as well as nausea and vomiting. The blood test results show high values of amylase and lipase.

What is the most common complication linked to this condition during pregnancy?

- 1. Pre-eclampsia
- **2.** Placental abruption
- **3.** Intra-uterine Growth Restriction (IUGR)
- **4.** Premature delivery

{username}

A 65-year-old woman arrived to the clinic following an exacerbation of itching in the genital area. She received treatment with Dermovate cream (high-dose topical steroid) 3 years ago due to a histological diagnosis of a chronic inflammatory condition, the name of which she does not recall. Upon examination, the genital area appears as presented in the image.

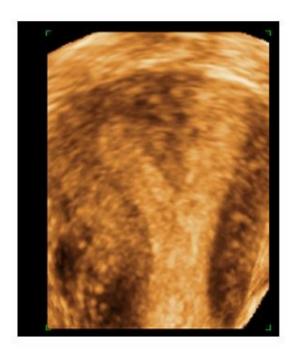


What is the correct next step in the management of the case?

- **1.** Use of an anti-histamine preparation
- **2.** Biopsy from the suspicious areas in the genitalia
- **3.** Hospitalization to treat with parenteral steroids
- **4.** Extensive local removal in the genital area

{username}

The image presents a Mullerian anomaly as shown on a 3D ultrasound of a healthy 25-year-old patient who is planning a pregnancy.

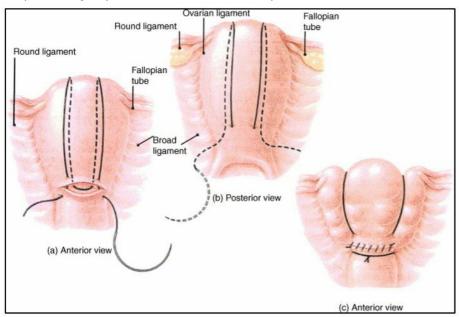


Which of the following <u>is not</u> a common pregnancy complication in this case?

- **1.** Infertility
- **2.** Miscarriage
- **3.** Premature birth
- **4.** Malpresentation

{username}

As part of the treatment for a Postpartum Hemorrhage, a laparotomy is performed as well as the procedure described in the image.

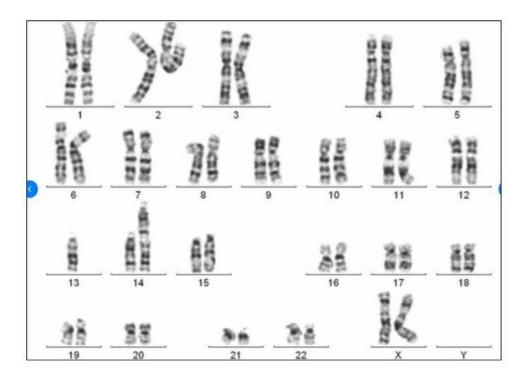


What is the most likely cause of hemorrhage in this case?

- **1.** Uterine atony
- **2.** Residual placenta
- **3.** Uterine rupture
- **4.** Placental abruption

{username}

A 28-year-old woman, no children, presents for evaluation during her 9th week of pregnancy. Ultrasound reveals a gestational sac with a fetal pole consistent with 7 weeks and 6 days, but no fetal cardiac activity. Her history includes four first-trimester miscarriages. A fetal karyotype image is provided.



What is the most likely cause of the recurrent pregnancy loss?

- **1.** Turner Syndrome
- **2.** Kleinfelter Syndrome
- **3.** Translocation
- **4.** Trisomy 21

{username}

A 26-year-old married woman, no children, plans pregnancy. She describes amenorrhea for the past 5 years. On the hormone profile, the estradiol levels are lower than 70mcg/dL; LH 0.3IU, FSH 0.5 IU.

What is the first-line treatment in this case?

- **1.** Oocyte donation
- **2.** Ovulation induction with letrozole
- **3.** Ovulation induction with gonadotropins including FSH and LH
- **4.** In vitro fertilization (IVF)

48

{username}

Which of the following complications, linked to insertion of an intrauterine device, is the most common?

- **1.** IUD expulsion
- **2.** Uterine perforation
- **3.** Pelvic inflammation
- **4.** Ectopic pregnancy

{username}

A 30-year-old female in week 26 of her third pregnancy, arrives to the ER with complaints of nausea, vomiting, and confusion. Blood test results: glucose level of 500 mg/dL, pH 7.2, and positive ketone levels. Monitoring of fetal heart rate shows variable slowing.

What is the recommended treatment in this case?

- **1.** Manage balance of fluids, electrolytes, and glucose
- **2.** Immediate delivery due to slowing of fetal heart rate
- **3.** Administer IV magnesium to prevent fetal complications
- **4.** Administer steroids for fetus lung maturation

{username}

A 25-year-old female patient, usually healthy, in week 36 of her first pregnancy, complains of a rash. Examination revealed the following findings (see image). The pregnant woman has neither sensitivity to medications, nor any other sensitivity.



What is the most likely diagnosis?

- **1.** Erythema multiforme
- **2.** Pruritic urticarial papules and plaques of pregnancy
- **3.** Viral eruption
- **4.** Pemphigoid gestationis

{username}

A 72-year-old male with a history of smoking, diabetes, hyperlipidemia, hypertension, and ischemic heart disease.

He was hospitalized in the Internal medicine department for pneumonia twice in the past month. He now presents in the ER with shortness of breath and productive cough from the day of admission. On examination, he has a fever of 38.9°C, oxygen saturation of 88% on ambient air (corrected with supplemental oxygen), respiratory rate of 35/min, and BP of 128/88 mmHg. Crackles above the right lung. Laboratory test results: 18000 leukocytes with neutrophilia, 12 mmol/L Urea (normal is up to 7), and the chest X-ray shows extensive opacity on the right.

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

- 1. Discharge the patient to his home with the recommendation of PO antibiotics
- Administer a dose of IV antibiotics at the ER and then discharge the patient to his home with the recommendation of PO antibiotics
- **3.** Admit the patient to the Internal medicine department
- **4.** Admit the patient to the Intensive Care Unit

52

{username}

Which of the following conditions is the most common in Cushing Syndrome?

- **1.** Diabetes mellitus
- **2.** Hypokalemic alkalosis
- **3.** Hyperpigmentation
- **4.** Obesity

{username}

A 35-year-old male with a history of intravenous drug use presents with swelling and pain in his left hand as of the day of admission, accompanied by a fever and the chills.

On admission: temperature 39.1°C, BP 110/60 mmHg, pulse 105 bpm. On examination - evidence for skin erythema and edema, with blue/purple bullae, and subcutaneous crepitus over the left arm

A CT was performed that demonstrated gas in the deep tissues of the left arm. Urgent surgical debridement was performed urgently in the OR, and he was diagnosed with Necrotizing Fasciitis. Cultures were taken that came back positive for Clostridium Perfringens.

Which of the following treatments is the most recommended for this patient?

- **1.** Ceftazidime plus doxycycline
- 2. Ciprofloxacin plus doxycycline
- **3.** Penicillin plus clindamycin
- **4.** Piperacillin-tazobactam plus vancomycin

{username}

A 54-year-old male is hospitalized due to fever, a generalized rash, and joint pain. He reports being bitten by a snake a week ago and was treated with antivenom at that time. He was discharged home the following day. Currently stable, with a temperature of 38.6°C. Upon physical examination, there is generalized lymphadenopathy, a rash, and diffuse joint tenderness.

What is the most likely diagnosis for this patient?

- **1.** Vasculitis
- **2.** Serum Sickness
- **3.** Systemic Lupus Erythematosus
- **4.** Catastrophic APLA Syndrome

55

{username}

A 61-year-old male with diffuse large B-cell lymphoma (DLBCL) undergoing chemotherapy. Presented to the ER due to complaints of a fever, headache, and vomiting for the past two days. On examination, there is the impression of neck stiffness. Lumbar puncture findings are consistent with bacterial meningitis. CSF and blood culture results are pending.

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

- **1.** Ceftriaxone + Vancomycin + Ampicillin
- **2.** Ceftazidime + Vancomycin
- **3.** Ceftriaxone +Vancomycin
- **4.** Piperacillin + Tazobactam

{username}

A 72-year-old female with ischemic cardiomyopathy and a left ventricular ejection fraction (LVEF) of 35%. Presents with shortness of breath upon moderate exertion. Her NYHA functional classification is II. She is treated with Entresto, Bisoprolol, Spironolactone, Aspirin and Atorvastatin.

On examination, her BP is 105/75 mmHg, pulse is regular at 60 beats per minute, and there are no signs of fluid overload.

Which additional treatment could reduce morbidity risks in this case?

- **1.** Ivabradine (If current inhibitor)
- **2.** Digoxin
- **3.** Empagliflozin (SGLT2 Inhibitor)
- **4.** Amlodipine (Calcium Channel Blocker)

{username}

An 18-year-old male presents to the ER with worsening asthma unresponsive to regular treatment with Albuterol and Symbicort. In ER received IV magnesium sulfate, Prednisone, and Albuterol inhalation.

Upon examination, BP 145/88 mmHg, respiratory rate 32/min, pulse 108 bpm, oxygen saturation 95% on ambient air.

On lungs auscultation, widespread wheezing noted bilaterally. Laboratory results:

| Glucose | PO2 (mm | PCO2 | HCO3 | PH | K | Na |
|---------|---------|---------|---------|------|---------|---------|
| (mg/dl) | Hg) | (mm Hg) | (mEq/L) | | (mEq/L) | (mEq/L) |
| 124 | 77 | 32 | 24 | 7.50 | 2.9 | 140 |

What is the most likely cause of hypokalemia in this patient?

- **1.** Albuterol
- **2.** Hypoxia
- **3.** Magnesium Sulfate
- **4.** Hyperglycemia

{username}

A 36-year-old female waws brought to the ER with a tonic-clonic seizure. In the past week she has suffered from severe headaches. She has recently diagnosed Systemic Sclerosis (SSc).

Treated with Nifedipine due to Raynaud's Phenomenon.

Upon examination, temperature of 37°C, blood pressure 240/120 mmHg, pulse 90/minute, breathing rate 18/minute, and saturation of 96% on ambient air.

Neurological assessment: no abnormal findings.

Laboratory: Hemoglobin 11 g/dL, Hematocrit 33%, Platelets 90000µL, Creatinine 2.4 mg/dL.

Urine test; protein +2, no blood or casts.

Blood smear: red cell fragments (Schistocytes).

Which of the following treatments is the most suitable?

- **1.** Captopril
- **2.** Cyclophosphamide
- **3.** Methylprednisolone
- **4.** Metoprolol

{username}

A 25-year-old female, usually healthy, presents with right knee pain and back pain for one week, and morning stiffness. Rules out small joint pain.

3 weeks ago, she contracted Chlamydia Trachomatis, and was treated with Doxylin. Examination: tenderness of the right knee without redness or local warmth.

Blood test: Leukocytes - 8000/mm³, ESR - 80 mm/h (normal value is up to 20). Knee aspiration findings: serous fluid with 3500/mm³ leukocytes; gram staining shows no evidence of pathogens.

What is the most likely diagnosis in this case?

- **1.** Rheumatoid Arthritis
- **2.** Ankylosing Spondylitis
- **3.** Septic Arthritis
- **4.** Reactive Arthritis

60

{username}

A 50-year-old male with a history of diabetes, hypertension, hyperlipidemia, and chronic renal insufficiency.

e-GFR = 40 ml/min/1.73m² with proteinuria

Which of the following conditions most accurately describes chronic kidney disease (CKD)?

- **1.** Osteitis fibrosa cystica does not occur as a result of elevated secretion of PTH
- In CKD, there is a loss of sodium and fluids via the kidneys, leading to low blood pressure in most patients
- **3.** Potassium levels are low in CKD, leading to elevated absorption via the digestive tract
- **4.** Lack of ammonia production in the kidneys reduces proton secretion, resulting in metabolic acidosis

{username}

A 20-year-old female with HIV, under regular follow-up and treatment. Presents to the ER with confusion and fever of 38.4°C. No cough, urinary symptoms, or changes in bowel movements. Laboratory tests gave the following results:

| LDH | Indirect | Total | Urea | Creatinine | Platelets/ml | Hemoglobin |
|------|-----------|-----------|-------|------------|--------------|------------|
| U/L | Bilirubin | Bilirubin | mg/dL | mg/dL | | g/dL |
| | mg/dL | mg/dL | | | | |
| 1150 | 5 | 5.5 | 60 | 2.5 | 16000 | 8.2 |

Coagulation functions and fibrinogen are in the normal range. Schistocytes in the blood smear. A working diagnosis of Thrombotic Thrombocytopenic Purpura is made, and plasma exchange is initiated.

Which of the following treatments will reduce the risk of recurrence of the disease?

- **1.** Rituximab
- **2.** Phototherapy
- **3.** Bortezomib
- **4.** Abciximab

{username}

A 35-year-old male, generally healthy, arrived to the attending physician due to incidental finding of Factor V Leiden. He rules out a history of thromboembolic events. The test was performed at his request because his friend was diagnosed with a pulmonary embolism, and he is worried about this. The patient is asking about treatment for himself.

What is the most correct recommendation for this patient?

- **1.** Anticoagulant treatment for 3 months only
- **2.** Anticoagulant treatment for 6 months only
- **3.** Anticoagulant treatment for life
- **4.** No treatment is needed at this stage

63

{username}

A 26-year-old female arrives to the ER due to general weakness, sweating, heat intolerance, and throat pain. She reports a runny nose two weeks ago. Upon admission, she had a fever of 38°C, tenderness and enlargement of the thyroid gland on palpation. Laboratory tests showed an elevated ESR, high FT3 and FT4 levels, and a very low TSH level. A Radioactive Iodine Uptake Test was performed on the thyroid gland.

Which finding is highly likely on the Radioactive Iodine Uptake test?

- **1.** Elevated focal uptake
- **2.** Elevated diffuse uptake
- 3. Low uptake
- **4.** Normal uptake

{username}

A 75-year-old male diagnosed with Chronic Lymphocytic Leukemia. The patient is asymptomatic.

Which of the following findings would indicate the need to start treatment?

- **1.** Asymptomatic splenomegaly
- **2.** Weight increase of >10% in 6 months
- **3.** Fever of 38°C for 3 weeks, without evidence of an infection.
- **4.** Hepatomegaly

65

{username}

A 40-year-old male shepherd presents with lower back pain, high fever, and night sweats for about one month. Upon admission, a temperature of 38.3°C. On examination, hepatomegaly palpated. Serology and blood cultures confirm Brucella infection. Echocardiography completed - no abnormal findings.

What is the most appropriate antibiotic treatment at this stage?

- **1.** Streptomycin + Doxycycline
- **2.** Amoxicillin
- **3.** Ceftriaxone + Azithromycin
- **4.** Doxycycline + Azithromycin

{username}

A 43-year-old female, usually healthy, As part of the routine tests, a general urine test was performed that showed 25 leukocytes in the urine, and the urine culture showed growth of E-COLI.

The patient rules out fever, urgency, frequent urination, blood, or burning upon urination.

What is the most appropriate next step?

- **1.** Start treatment with Nitrofurantoin
- **2.** Start treatment with Ciprofloxacin
- **3.** Start treatment with Ertapenem
- **4.** There is no need for treatment at this stage

67

{username}

A 78-year-old female has been complaining of shortness of breath on exertion for the past 6 weeks. She has a history of hypertension and attacks of atrial fibrillation. The patient is treated with Apixaban, Enalapril, and Disothiazide. Upon examination, BP 148/90 mmHg. Other vital signs are in the normal range. BMI = 38. No jugular vein distention; the lungs are clear. Above the heart, S4 without murmurs. ECG shows sinus rhythm with signs of left ventricular hypertrophy. Echocardiography shows LVEF of 55% and symmetrical left ventricular wall thickening.

What is the most likely diagnosis?

- **1.** Heart Failure with Preserved Ejection Fraction
- **2.** High-output heart failure
- **3.** Hypertrophic Obstructive Cardiomyopathy
- **4.** Shortness of breath due to a non-cardiac origin.

{username}

A 40-year-old male athlete presents to the ER with extreme weakness after intense and exhausting physical exertion. Laboratory results reveal new acute renal insufficiency: creatinine 2.5 mg/dL, BUN 40 mg/dL from normal baseline values.

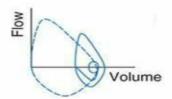
Which additional criterion would define his condition as acute renal insufficiency?

- 1. Urine output of less than 0.5 ml/kg for 6-12 hours
- **2.** Urine output of less than 0.7 ml/kg for 6-12 hours
- **3.** Urine output of less than 0.9 ml/kg for 6-12 hours
- **4.** The amount of urine output is not relevant for this definition

{username}

A 70-year-old male, a former smoker, complains of shortness of breath and a dry cough. Pulmonary function tests demonstrate the following:

| Percentage of Normal Predicted Values (%) | |
|--|---|
| 55 | Total Lung Capacity (TLC) |
| 78 | Forced Expiratory Volume in 1 second (FEV1) |
| 62 | Forced Vital Capacity (FVC) |
| 60 | Residual Volume (RV) |
| 60 | Functional Residual Capacity (FRC) |
| 60 | Diffusion Capacity of Lung for Carbon Monoxide (DLCO) |



Based on the attached findings, what is the most likely reason or the patient's symptoms?

- **1.** Aspiration of a foreign object
- **2.** Chronic Obstructive Pulmonary Disease
- **3.** Idiopathic Pulmonary Fibrosis
- **4.** One-sided paralysis of the vocal cords

{username}

A 33-year-old male, generally healthy, is hospitalized due to an ischemic frontal cerebrovascular accident on the left side. On examination, there is a persistent split of the second heart sound without murmurs. An ECG shows sinus rhythm with partial right bundle branch block.

CTA of the neck and brain arteries reveals no sclerosis or stenosis.

Holter monitoring shows sinus rhythm without atrial fibrillation.

Which of the following tests will help advance the diagnosis?

- **1.** Coronary CT Angiography
- **2.** Cardiac MRI
- **3.** Electrophysiological study (EPS)
- **4.** Transesophageal echocardiography (TEE)

71

{username}

A 32-year-old female is hospitalized for prolonged febrile illness.

On the physical examination, a systolic murmur is heard over the mitral valve.

On the blood cultures, growth of methicillin-sensitive Staphylococcus aureus (MSSA).

Echocardiography reveals a 5 mm vegetation on the mitral valve.

Antibiotic treatment was started according to sensitivity to the bacterium.

After ten days of treatment, the patient complained of shortness of breath and dizziness.

Which finding would necessitate surgical intervention in this patient?

- **1.** Systolic blood pressure of 100 mmHg.
- **2.** Complete A-V Block on the ECG chart
- **3.** Temperature of above 38°C with a finding of an abscess in the leg.
- **4.** Increase in the level of creatinine.

{username}

A 62-year-old male, with multiple myeloma in remission. He was admitted due to angina.

ECG findings: T-wave inversion in leads V4–V6. Elevated troponin. Coronary catheterization reveals stenosis of the left circumflex artery, a drug-eluting stent was placed.

Two days post-procedure, creatinine increases to 1.8 mg/dL from a baseline of 1 mg/dL. Urine tests show no casts or red cells. FeNa < 1%.

What is the most likely cause of his renal function deterioration?

- **1.** Undiagnosed Renal Artery stenosis
- **2.** Drug-induced interstitial nephritis
- **3.** Pigment-induced tubular necrosis
- **4.** Contrast-induced nephropathy

73

{username}

A 55-year-old female has been suffering from difficulty swallowing both solids and liquids for the past few weeks. She also complains of heartburn and unintentional weight loss. The attending physician suspects achalasia.

Which of the following statements is most correct regarding this condition?

- **1.** Manometry findings is expected to show normal peristalsis and relaxation of the lower esophageal sphincter
- **2.** Barium swallow X-ray is expected to reveal a corkscrew esophagus
- **3.** Endoscopy is compulsory in these patients
- **4.** The condition is usually caused by an excess of ganglion cells in the esophageal myenteric plexus

{username}

An 84-year-old female with a history of hiatal hernia, managed with Omeprazole. Was diagnosed with a urinary tract infection one week ago and treated with Ciprofloxacin, resulting in improvement. She now presents to the ER with abdominal pain and frequent diarrhea (approximately 6 episodes daily). On admission: BP 80/60 mmHg, temperature 37.5°C, oxygen saturation 98% on ambient air, pulse 110 bpm. Examination reveals significant abdominal tenderness on palpation. Laboratory results: creatinine 2.3 mg/dL, and leukocytosis - 22,000. A fecal sample was taken that returned positive for Clostridioides difficile. Treatment was started with IV fluids.

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

- **1.** P.O Fidaxomicin
- **2.** P.O Vancomycin
- **3.** Fecal microbiota transplantation
- **4.** P.O Vancomycin combined with IV metronidazole

{username}

A 48-year-old male with obesity, hypertension, recent diagnosis of diabetes. He presents with abdominal striae and mood changes. A chest X-ray shows evidence of osteopenia in the thoracic vertebrae.

Which of the following tests will most significantly advance the diagnosis?

- **1.** Spiral CT of the thorax
- **2.** Catecholamine levels in the urine
- **3.** ACTH levels
- **4.** 1 mg Dexamethasone suppression test

76

{username}

A 48-year-old male arrived to the ER due to epigastric pain that started after a meal. The pain is acute, radiates to the back in a belt-like pattern. Upon examination, there is epigastric tenderness without signs of peritoneal irritation. Laboratory results show a cholestatic pattern of liver enzyme abnormalities. Amylase and lipase levels are elevated to 5 times the normal range. An abdominal CT reveals fat stranding around the pancreas - suspected acute pancreatitis. Which of the following is the most common cause of acute pancreatitis?

- **1.** Hypercalcemia
- 2. Hypertriglyceridemia
- **3.** S/P Endoscopic Retrograde Cholangiopancreatography (ERCP)
- **4.** Gallstones in the bile ducts

{username}

A 64-year-old male smoker with a history of hypertension treated with Amlodipine. As part of investigation of a pulmonary nodule in the right lower lobe, was diagnosed with small cell carcinoma. No evidence of metastases was found.

What is the most suitable treatment for this patient?

- **1.** Surgery to remove the affected lobe
- **2.** Only follow-up at this stage
- **3.** Palliative treatment
- **4.** Combined chemotherapy and radiotherapy

{username}

A 38-year-old female with recently diagnosed hypertension is being treated with Disothiazide and Amlodipine. Her 35-year-old brother also has hypertension.

On admission, BP is 166/102 mmHg in both arms.

Laboratory tests:

| | Sodium | Potassium | Creatinine | Bicarbonate | Urinalysis |
|---------------------|---------|-----------|------------|-------------|------------------------|
| | mEq/L | mEq/L | mg/dl | mEq/L | |
| Normal range | 135-145 | 3.5-5.2 | 0.8-1.1 | 23-28 | |
| Patient's values | 140 | 2.9 | 0.9 | 26 | No blood or protein |

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

- **1.** 24-hour urine collection for cortisol levels
- **2.** CT angiography of the renal arteries
- **3.** Measurement of aldosterone-to-renin ratio in serum
- **4.** Measurement of serum metanephrine levels

{username}

A 29-year-old female has been complaining of abdominal pain and frequent diarrhea for the past two months. As part of the investigation, she underwent a colonoscopy. She was diagnosed with Crohn's Disease.

Which of the following symptoms is consistent with disease severity?

- **1.** Anterior uveitis
- **2.** Erythema nodosum
- **3.** Pyoderma gangrenosum
- **4.** Sacroiliitis

80

{username}

A 38-year-old female with a history of asthma is on regular treatment with high-dose inhaled corticosteroids and long-acting beta-2 agonists (LABA). She indicates a use of a short-acting beta-2 agonist (SABA) as needed. Reports recent nocturnal dyspnea, limitation of physical activity, and SABA use about four times per week.

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

- **1.** No changes to the current treatment are needed
- **2.** Addition of oral steroids
- **3.** Discontinue Long acting Beta2 agonist (LABA)
- **4.** Add a long acting muscarinic antagonist (LAMA)

{username}

A 23-year-old female, usually healthy, presents with throat pain and fever for the past three days. Upon admission, fever of 39.1°C, normal vital signs otherwise. Physical examination reveals enlarged cervical lymph nodes, in oral cavity - discharge on both tonsils without leukoplakia, and an enlarged spleen in abdominal examination. Laboratory tests show leukocytosis - 18,000. 15% atypical lymphocytes. Infectious serology is positive for Epstein-Barr Virus.

What is the most appropriate treatment in this case?

- **1.** Treatment with Ampicillin should be started.
- **2.** Treatment with Acyclovir should be started.
- **3.** Physical activity is recommended in order to shorten the duration of the disease
- **4.** Rest and analgesics alone are recommended

82

{username}

A 70-year-old male was hospitalized in intensive care with a diagnosis of severe pneumonia. He has a history of diabetes. Receives regular treatment with Metformin. While hospitalized, the glucose values are around 300 mg/dL.

What is the most correct treatment at this stage?

- **1.** Administer insulin to reduce glucose sugar to 100-120 mg/dL
- **2.** Administer insulin to reduce glucose sugar to 140-180 mg/dL
- **3.** Continue treatment with the regular dose of Metformin
- **4.** Add a sulfonylurea medication

{username}

A 21-year-old male diagnosed with poststreptococcal glomerulonephritis.

Which of the following findings is most likely to be seen in urinalysis?

- 1. In a 24-hour urine collection, more than 3 grams of protein, without hematuria.
- **2.** In a 24-hour urine collection, microscopic hematuria with 225 mg of protein.
- **3.** Urine culture is positive for Streptococcus
- **4.** Normal urine test

84

{username}

A 50-year-old female has been complaining recently of weight gain and extreme weakness. Laboratory test results:

TSH = 50; low T3 and T4 levels.

Which of the following symptoms is likely to accompany this condition?

- **1.** Diarrhea
- **2.** Tachycardia
- **3.** Hair loss
- **4.** Increased appetite

{username}

A 43-year-old male, no concomitant diseases. Arrived to the ER due to abdominal pain, nausea, and vomiting after ingesting a large number of Acamol tablets. Laboratory results show an acetaminophen level of 145 mcg/mL, measured about eight hours after ingestion. Standard treatment with N-acetylcysteine was initiated.

What is true regarding his likely diagnosis?

- 1. This diagnosis is a rare cause of acute hepatic insufficiency in the Western world.
- 2. Individuals who survive this condition are highly unlikely to develop residual liver damage.
- **3.** Activated charcoal is only effective if administered eight hours post-ingestion.
- **4.** Hepatitis C infection does not increase the risk of liver damage in patients with this diagnosis.

86

{username}

A 72-year-old male with a history of hypertension and hyperlipidemia. He has been complaining on worsening shortness of breath for one week. He underwent a chest X-ray at the ER that revealed

new pleural fluid on the right side. As part of the investigation, a puncture of the pleural fluid was performed, and sent to the laboratory for investigation. The next day, the following results were obtained: the ratio of protein in fluid to blood - 0.7, the ratio of LDH in fluid to blood 0.75, and the protein difference between the fluid to the blood was 1.8 gr/dL.

Which of the following conditions is the most likely cause of the pleural effusion in this patient?

- **1.** Nephritic syndrome
- **2.** Heart failure
- **3.** Pneumonia
- **4.** Liver cirrhosis

{username}

A 60-year-old female with systemic scleroderma reports worsening shortness of breath over the past 8 months. On examination, the vital signs are normal, with preserved saturation on ambient air, pronounced pulmonary component of the second heart sound. On the Non-Contrast CT of the chest, there is enlargement of the pulmonary arteries. Echocardiography reveals a slightly enlarged right ventricle with preserved function and moderate tricuspid regurgitation, with a pressure gradient of 55 mmHg.

What is the next step in management that would most significantly confirm the reason for her condition?

- **1.** Arterial blood gas analysis
- **2.** Stress test
- **3.** Methacholine challenge test
- **4.** Right heart catheterization

88

{username}

A 57-year-old male presents to the ER with severe pain in frontal chest for 30 minutes. The pain radiates to the lower jaw and is accompanied by excessive sweating and shortness of breath. On examination, BP is 115/90 mmHg, and pulse is 95 beats per minute.

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

- **1.** Perform a full 12-Lead EKG examination
- **2.** Echocardiography
- **3.** Serum troponin test
- **4.** Coronary CT Angiography

{username}

A 72-year-old male with diabetes is hospitalized with fever and cough.

Chest X-ray reveals an inflammatory infiltrate, and a urine antigen test is positive for Legionella. Which of the following is true regarding this disease?

- **1.** Infection is usually hematogenous
- **2.** Gastrointestinal symptoms are more common in pneumonia caused by this bacterium.
- **3.** The urine antigen test detects all serotypes of the bacterium
- **4.** The treatment of choice is Ceftriaxone.

90

{username}

An 80-years-old male, hypertension, managed with Metoprolol and Disothiazide.

He has been complaining of fatigue in recent weeks.

On examination, his heart rate is 40 beats per minute and regular.

The ECG showed sinus bradycardia with a normal PR interval.

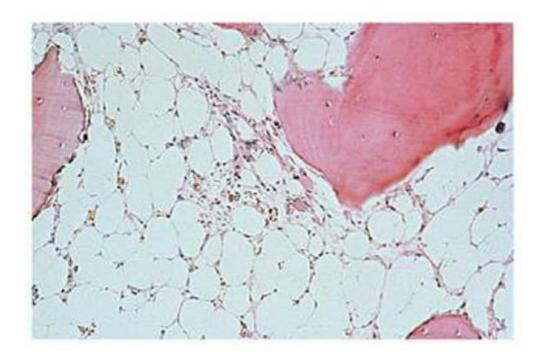
The TSH and hemoglobin values are normal.

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

- **1.** Implantation of a Dual Chamber Pacemaker
- **2.** Discontinuation of Metoprolol
- **3.** Discontinuation of Disothiazide
- **4.** Addition of treatment with Theophylline

{username}

A 30-year-old female, physician, complains of extreme weakness in recent days. A blood count shows hemoglobin of 6.3 g/dL; MCV 90 fL, leukocytes 1500/ μ L; platelets 65,000/ μ L The results of the bone marrow biopsy are presented (image attached).



Which of the following diagnoses is the most suitable for these findings?

- **1.** Megaloblastic anemia
- **2.** Aplastic anemia
- **3.** Sideroblastic anemia
- **4.** Myelodysplastic syndrome

{username}

A 50-year-old female with a history of total gastrectomy. She is asking regarding the need for continued treatment with Vitamin B12 injections.

Which of the following recommendations is most correct and why?

- 1. No need for injections if the diet contains sufficient vitamin B12
- **2.** Regular vitamin B12 injections are required due to a lack of pepsin secretion
- **3.** Regular vitamin B12 injections are required due to a lack of somatostatin secretion
- **4.** Regular vitamin B12 injections are required due to a lack of intrinsic factor secretion

93

{username}

A 25-year-old male presents to the ER with generalized weakness.

On examination, he is pale with conjunctival jaundice.

Laboratory findings: anemia 7 gr/L (normal range: 13-16), bilirubin 8 mg/dL (normal range: 0.3-1.2), mostly indirect. A working diagnosis is hemolysis. Results of the LDH and haptoglobin are pending. (The normal value range for LDH is 120-200 U/L, and the normal value range for Haptoglobin is 40-160 mg/dL.)

Which of the following laboratory results supports the most likely diagnosis?

- **1.** LDH 1200 U/L, haptoglobin 200
- **2.** LDH 100 U/L, haptoglobin 200
- **3.** LDH 1200 U/L, haptoglobin 10
- **4.** LDH 100 U/L, haptoglobin 40

{username}

A 48-year-old female, usually healthy. Presents to the ER with stabbing left-sided chest pain for two hours before admission. The pain worsens with deep breathing and is accompanied by shortness

of breath but is not exertional and does not radiate. Vital signs upon admission: BP 130/80 mmHg, pulse 120 bpm, temperature 36.6°C, oxygen saturation 89% on ambient air, respiratory rate 22/min. Physical examination shows normal heart and lung sounds, with +2 edema in the left shin.

ECG shows sinus tachycardia (rate 120 bpm) without signs of acute ischemia.

What is the next diagnostic step that would most significantly advance the diagnosis?

- **1.** Echocardiography
- **2.** D-Dimer test
- **3.** Troponin test
- **4.** Chest CT Angiography

95

{username}

A 68-year-old male, smoker, 50 pack-years. Arrived for consultation due to shortness of breath on exertion and a chronic productive cough with yellow sputum for six months. Rules out chest pain, fever, or hemoptysis. BP 125/80, pulse 84 per minute, saturation on ambient air 87%. In lungs assessment - prolonged expirium with expiratory wheezes. Laboratory: hemoglobin 15.5 gr/dL.

Which treatment has been proven to improve prognosis in similar cases?

- **1.** Roflumilast (Phosphodiesterase 4 (PDE4) inhibitor)
- **2.** Oral Glucocorticoids
- 3. Oxygen
- **4.** Theophylline

{username}

What is correct regarding the QRS vector average on an ECG?

- **1.** -20° axis is considered normal
- **2.** -35° axis is considered to be Right Axis Deviation
- **3.** +110° axis is considered to be Left Axis Deviation
- **4.** -75° axis is considered to be Extreme Axis Deviation

97

{username}

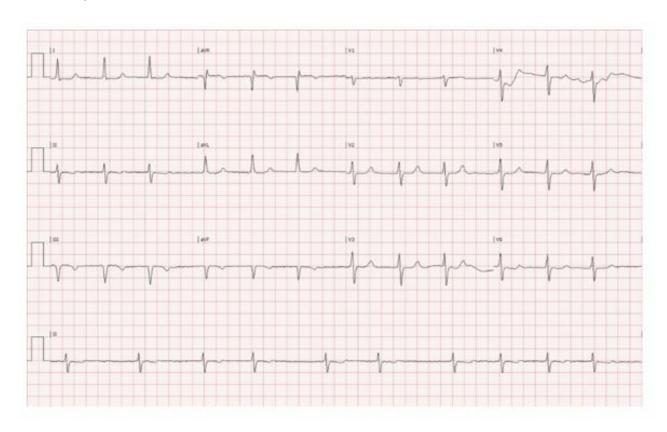
A 45-year-old male smoker with no concomitant conditions, presents to the ER with typical angina. Serial ECGs performed in the ER show sinus rhythm with transient ST elevations of 1 mm in leads V1–V4. The laboratory results show mildly elevated troponin. Coronary catheterization demonstrates coronary arteries without sclerosis, although there was local vasospasm in the left anterior descending (LAD) artery during hyperventilation.

What is the most appropriate treatment to recommend at this stage?

- **1.** Treatment with Vitamin E
- **2.** Treatment with aspirin
- **3.** Treatment with calcium channel blockers
- **4.** Perform PCI and implant a stent in the LAD.

{username}

A 78-year-old male with a history of diabetes, managed with metformin. Normal functional fitness according to NYHA; he rules out palpitations, loss of consciousness, or chest pain. An ECG is provided:



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

- **1.** Propafenone
- **2.** Apixaban
- **3.** Clopidogrel
- **4.** The patient is asymptomatic, no treatment is required

{username}

A 65-year-old female with a background of morbid obesity. Arrives to the ER complaining of abdominal swelling and edema in the calves, persisting for one month.

On examination, ascites was noted.

Ascitic fluid puncture: Albumin 1.2 mg/dL Leukocytes 300, of which 80 are neutrophils. In the blood: Albumin 3.8 mg/dL

What is the likely etiology of the patient's condition?

- **1.** Nephritic syndrome
- **2.** Pancreatitis
- **3.** Cirrhosis of the liver
- **4.** SBP Spontaneous Bacterial Peritonitis

{username}

An 88-year-old male with uncontrolled diabetes. Was hospitalized in an internal medicine department for fever of unknown origin. A total body CT revealed inflammatory activity in the lumbar spine, suspected acute osteomyelitis.

Which pathogen is the most likely cause of the infection?

- **1.** Escherichia coli
- **2.** Pseudomonas aeruginosa
- **3.** Brucella
- **4.** Staphylococcus aureus

101

{username}

A 90-year-old male with a history of dementia, diabetes, and hypertension. He was referred to the ER due to confusion and lethargy. Recently, he experienced viral gastroenteritis with multiple episodes of diarrhea. Examination shows dehydration and positive orthostatic changes. Laboratory results: sodium 165 mmol/L.

Which of the following statements is true regarding his condition?

- **1.** Complete correction of hypernatremia should occur within 8 hours
- **2.** Treatment for sodium levels involves hypertonic saline 3%
- **3.** Lithium is the second-line treatment for sodium levels
- **4.** Sodium correction should not exceed 10mM in 24 hours

{username}

A 26-year-old male presents with complaints of fever, abdominal pain, a rash, and right knee inflammation that lasted 3 days and resolved a week ago. He reports similar episodes about three times per year. Had an appendectomy at age 5 without signs of inflammation. His paternal grandfather and maternal grandmother had a similar syndrome. From the physical examination, including vital signs, no pathological findings were observed. Laboratory results: ESR 23 mm/h (normal - up to 15), normal serum creatinine, urinalysis with protein +1.

Which of the following treatments is the most suitable at this stage?

- **1.** Canakinumab
- **2.** Indomethacin
- **3.** Colchicine
- **4.** Cyclosporine

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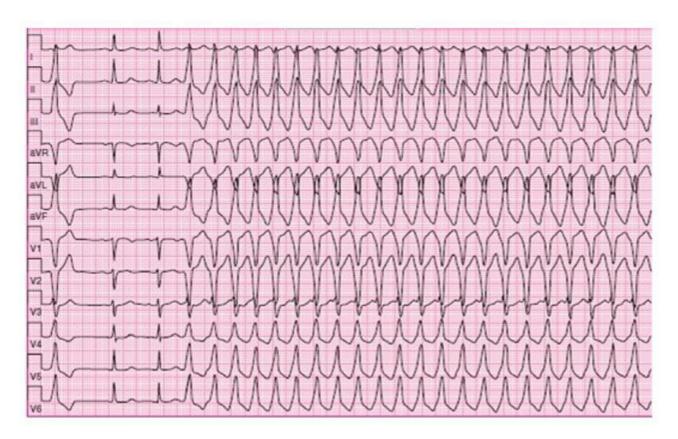
A 58-year-old female, usually healthy and not on regular medication. Was recently diagnosed with depression and started a treatment with medication from the SSRI group. She presents to the ER with headaches, nausea, and vomiting for two days. Laboratory findings: sodium 114 mEq/L, blood osmolarity 260 mOsm/Kg, urine osmolarity 420, and urine sodium 53. Cortisol and TSH levels are in the normal range.

All of the following treatments are part of the management for her condition except:

- **1.** Fluid intake restriction
- **2.** Fusid
- **3.** Hypertonic saline 3%
- **4.** Desmopressin

{username}

A 28-year-old male, without background disorders. Recent complaints of palpitations upon exertion, that resolve spontaneously at rest. The following is chart of ECG that was performed during exertion, shows tachycardia, which resolved at rest. Echocardiography and cardiac MRI are normal.



What is the most common reason for this condition?

- **1.** Arrhythmogenic Right Ventricular Cardiomyopathy
- **2.** Hypertrophic Obstructive Cardiomyopathy (HOCM)
- **3.** Scar-mediated reentrant Ventricular Tachycardia
- **4.** Right Ventricular Outflow Tract Ventricular Tachycardia

{username}

A 60-year-old female is complaining of pain in the eyes, fatigue, dry mouth, irritated eyes, and a change in the color of her fingers after exposure to cold, which resolves quickly upon rewarming. Upon examination, her vital signs are normal. There is bilateral enlargement of the parotid glands, without lymphadenopathy. Reduced saliva collection.

Laboratory results show an ESR of 77 mm/hour (normal ≤20 for women), CRP of 0.23 mg/dL (normal 0.5-2.3), and a rheumatoid factor level of 202 U/mL (normal <40).

Which of the following tests will most significantly advance the diagnosis?

- **1.** Anti-neutrophil cytoplasmic antibodies (ANCA) test
- **2.** Anti-cyclic citrullinated peptide antibodies (Anti CCP) test
- **3.** Anti-Ro/SSA antibodies test
- **4.** HLA B27 test

{username}

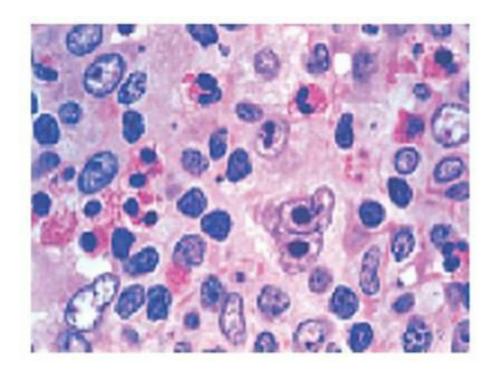
A 28-year-old male with diabetic ketoacidosis (DKA). Treatment was started with IV fluids and insulin. A repeat laboratory test 3 hours after treatment showed: pH 7.2, Bicarbonate 15, Glucose 200 mg/dL, Potassium 4.8 mg/dL. The patient is producing a normal amount of urine.

What is the most correct treatment approach at this stage?

- **1.** Continue IV insulin with 0.45% sodium chloride
- 2. Continue administration of insulin intravenously, and administer 0.45% Sodium+5% Dextrose with an addition of Potassium intravenously.
- Add treatment with Kayexalate (Polystyrene Sulfonate) and switch to subcutaneous insulin
- **4.** At this stage, the patient can be switched to oral medications for glucose reduction

{username}

A 50-year-old male presents with fever, fatigue, night sweats, and unintentional weight loss over the past month. Physical examination reveals enlarged cervical and axillary lymph nodes. A lymph node biopsy from the neck shows the following pathological findings:



What is the most accurate statement about the patient's likely disease?

- **1.** T-lymphocytes are the source of the disease
- **2.** The Ann Arbor staging system is used to rate this disease
- **3.** A t(14;18) translocation is characteristic of this disease
- **4.** The HTLV-1 virus is linked to the development of this disease

{username}

A 56-year-old male with severe mitral stenosis secondary to rheumatic heart disease complains of dyspnea on mild to moderate exertion.

What is true regarding the physiological variables in this patient?

- **1.** Diastolic filling time is elongated
- **2.** Left atrial pressure increases
- **3.** Pulmonary vascular resistance is reduced
- **4.** The pressure gradient across the mitral valve decreases

109

{username}

A 25-year-old female presents with joint pain involving her hands, associated with morning stiffness lasting over an hour, for the past 3 years. The patient is suffering from a photosensitive facial rash, occasional fatigue, and feverish feeling.

On examination: normal vital signs. Tenderness upon palpation and swelling in the second and third metacarpophalangeal joints bilaterally.

Blood count, serum creatinine, and a urine test within the norm. Elevated ESR.

What is the most reasonable next step in the investigation to advance the decision about a diagnosis?

- **1.** Antinuclear antibodies
- **2.** Anti-double-stranded DNA antibodies
- **3.** Anti-Smith antibodies
- **4.** Anti-Ro/SSA, anti-La/SSB antibodies

{username}

A 58-year-old male with a known history of liver cirrhosis. Arrives to the ER accompanies family members due to confusion on the day of presentation.

Vital signs upon arrival: blood pressure 128/68 mmHg, pulse 87 bpm, temperature 36.4°C, and oxygen saturation 97% on ambient air.

The physical examination showed positive asterixis but was otherwise unremarkable. Laboratory results revealed elevated ammonia levels. With a working diagnosis of hepatic encephalopathy, he was admitted to the Internal medicine department for continued treatment.

All of the following <u>are included</u> in treatment options for this condition (Hepatic Encephalopathy) <u>except</u>:

- **1.** Protein-rich diet
- **2.** Zinc
- **3.** Rifaximin
- **4.** Lactulose