

Anemia Cases (3)

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Received: 13-10-2022;

Accepted: 17-01-2023;

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www.ijpcs.net

DOI:
10.5530/ijpcs.2024.13.29

ABSTRACT

The multiple choice questions are one of the educational tools widely popular among undergraduate and postgraduate candidates, healthcare professionals, and healthcare faculties. Suppose used for efficient assessment, objective orientation, assessment of various levels of learning, versatile applications, and knowledge review process. Besides, it prepares students for license board exams and other advanced board certifications in multiple subjects and specialties. The exams section texts your knowledge with various topics and related information.

Keywords: Multiple choice questions, pharmacy, healthcare, Exams education, Anemia Cases.

1. K.L., a 73-year-old female (57 kg), comes to the hospital with non-valvular atrial fibrillation. She is asymptomatic after receiving metoprolol to regulate her heart rate. She has hypertension and dyslipidemia. Her drug regimen consists of metoprolol tartrate 100 mg orally twice daily and enalapril 10 mg orally twice daily. Her heart rate is 78 beats per minute, and her blood pressure is 134/86 mmHg. Her SCr is 0.8 mg/dL, and her CrCl is 60 mL/minute; she has a normal liver function.
 - 1.1 Which best represents K.L.'s CHA2D2-VASc score?
 - A. CHA2D2-VASc score 1
 - B. CHA2D2-VASc score 3
 - C. CHA2D2-VASc score 5
 - D. CHA2D2-VASc score 2
 - 1.2 Which is the most appropriate stroke prevention strategy for this patient?
 - A. Aspirin 325 mg orally once daily.
 - B. Rivaroxaban 20 mg orally once daily.
 - C. Apixaban 2.5 mg orally twice daily
 - D. Edoxaban 30 mg orally once daily.
 - 1.3 K.L. started using dabigatran and was involved in a car accident three months later, resulting in a cerebral hemorrhage. Which reversal approach is most suited for this patient?
 - A. Protamine.
 - B. Fresh frozen plasma (FFP).
 - C. Andexanet alfa
 - D. Idarucizumab.
2. K.R., a 52-year-old female with a BMI of 36 kg/m², appears in the emergency department with pain, swelling, and redness in her right leg and thigh. She reports that she had surgery around two weeks ago and has not moved much at home in the last two weeks. Her vitals are normal. Her initial laboratory results show a positive D-dimer, a negative troponin, and a CrCl rate of 65 mL/minute. Her diagnoses include deep vein thrombosis (DVT) and pulmonary embolism (P.E.). She has hypertension, type 2 diabetes, and dyslipidemia. She has smoked one pack of cigarettes per day for the last 30 years. Her medications include lisinopril 10 mg orally daily, chlorthalidone 25 mg orally daily, metformin 1000 mg twice a day, pravastatin 40 mg orally daily, and hydrocodone 5 mg/acetaminophen 325 mg orally every 6 hours as needed for pain.

- 2.1 Which best depicts K.R.'s number of venous thromboembolism (VTE) risk factors?**
- 3.
 - 4.
 - 5.
 - 6.
- 2.2 Which is the most appropriate treatment strategy for K.R.?**
- Enoxaparin 100 mg subcutaneously every 12 hours and dabigatran 150 mg orally twice daily; after five days, enoxaparin can be discontinued.
 - Rivaroxaban 15 mg orally twice daily for seven days, followed by 20 mg once daily.
 - Enoxaparin 100 mg subcutaneously every 12 hours for five days; then initiate edoxaban 60 mg orally once daily.
 - Unfractionated heparin (UFH) 4000-unit bolus, followed by 1000 units/hour and warfarin 7.5 mg orally daily to an INR of 2.0–3.0, discontinuing UFH when a therapeutic INR is reached.
- 3. A White girl (height 163 cm, weight 65 kg) appears to have recently had hip fracture surgery. She has healthy renal and hepatic functioning. What is the best regimen for preventing VTE in this patient?**
- Dabigatran 110 mg orally once 2 hours after surgery, followed by 220 mg orally once daily.
 - Enoxaparin 30 mg subcutaneously once daily.
 - Fondaparinux 2.5 mg subcutaneously once daily.
 - Edoxaban 60 mg orally once daily.
- 4. A.C. is a 74-year-old male (height 175 cm, weight 80 kg) newly diagnosed with non-valvular atrial fibrillation (NVAf). He also has a history of hypertension, dyslipidemia, stable ischemic heart disease, and systolic heart failure. His medications include aspirin 81 mg orally daily, enalapril 10 mg orally daily, atorvastatin 80 mg orally daily, metoprolol succinate 200 mg orally daily, furosemide 40 mg orally daily, spironolactone 25 mg orally daily, and amlodipine 10 mg orally daily. His heart rate is 72 beats/minute, and his blood pressure is 122/72 mm Hg. His laboratory values include K 4.9 mEq/L, stable SCr 1.9 mg/dL, and blood glucose 101 mg/dL.**
- 4.1 Which best depicts B.D.'s CHA2DS2-VASc score?**
- 2.
 - 3.
 - 4.
 - 5.
- 4.2 If I use the Cockcroft-Gault equation with total body weight, which of the following is the patient's CrCl?**
- 30 mL/min
 - 40 mL/minute
 - 60 mL/min
 - 65 mL/min
- 4.3 Which is the most appropriate regimen for reducing A.C.'s risk of stroke?**
- Dabigatran 75 mg orally twice daily.
 - Rivaroxaban 20 mg orally once daily.
 - Apixaban 5 mg orally twice daily.
 - Edoxaban 60 mg orally once daily.
- 4.4 When dabigatran dose should be reduced from 150 mg twice daily to 75 mg twice daily?**
- If the CrCl is less than 30 mL/min
 - If the CrCl is less than 40 mL/min
 - If the CrCl is less than 50 mL/min
 - If the CrCl is less than 60 mL/min
- 4.5 Apixaban is listed at the typical dose and is not reduced to 2.5 mg daily unless the patient meets two of three criteria. Which of the following is correct?**
- Age 80 or older, weight 60 kg or less, or SCr 1.5 mg/dL or greater
 - Age 60 or older, weight 70 kg or less, or SCr 1.5mg/dL or less.
 - Age 60 or less, weight 70 kg or greater, or SCr 1.5mg/dL or less.
 - Age 80 or less, weight 60 kg or greater, or SCr 1.5mg/dL or greater.
- 5. D.E. is a 62-year-old female with a history of severe primary mitral regurgitation. Her echocardiography shows considerable leaflet flaring that is unsuitable for mitral valve repair. She has a history of hypertension, dyslipidemia, and gout. Her meds are lisinopril 10 mg orally daily, hydrochlorothiazide 25 mg orally daily, simvastatin 40 mg orally daily, and allopurinol 300 mg orally daily. Her heart rate is 68 beats per minute, and her blood pressure is 128/74 mm Hg. Her CrCl is 68 mL per minute. She is set to have valve replacement surgery and receive a mechanical mitral valve. You are talking about the oral anticoagulant postoperative plan with D.E.'s team. Which is the optimal regimen for preventing thrombosis?**
- Adjusted-dose warfarin to an INR goal of 2.5–3.5 plus aspirin 81 mg orally daily.
 - Adjusted-dose warfarin to an INR goal of 2.0–3.0 plus aspirin 81 mg orally daily.
 - Adjusted-dose warfarin to an INR goal of 2.0–3.0.
 - Adjusted-dose warfarin to an INR goal of 2.5–3.5.
- 6. V.C., a 65-year-old male, was hospitalized for a heart failure exacerbation. He experiences symptoms even when exerting himself to a moderate degree. His medical history also includes stable ischemic heart disease, hypertension, type 2 diabetes, and a P.E. two years ago. He smokes two packs per day. His meds include bisoprolol 5 mg orally daily, lisinopril 10 mg orally daily, aspirin 81 mg orally daily, ranolazine 1000 mg orally twice daily, furosemide 40 mg orally daily, spironolactone 25 mg orally daily, and metformin 1000 mg orally twice daily. His blood pressure today is 110/70 mm Hg, and his heart rate is 58 beats per minute. His laboratory results are expected, except for a brain natriuretic peptide (BNP) of 1498 ng/mL. What is the most suitable VTE prevention method for V.C.?**
- Administer fondaparinux 5 mg subcutaneously daily.
 - Administer apixaban 2.5 mg orally twice daily.
 - Administer enoxaparin 40 mg subcutaneously daily.
 - His risk does not warrant prophylactic therapy.

7. A 45-year-old male arrives at the E.D. with pain and swelling in his left leg. His leg is warm and sensitive on examination, with 3+ pitting edema below the knee. His D-dimer test is positive, and his duplex ultrasonography reveals a femoral-popliteal DVT. He recognizes that he will require anticoagulant therapy, but he prefers to avoid injections if possible. His additional medical issues include hypertension, HIV, and dyslipidemia. His prescriptions include benazepril 20 mg orally daily, ritonavir 100 mg orally daily, darunavir 800 mg orally daily, emtricitabine 200 mg/tenofovir disoproxil fumarate 300 mg orally daily, and atorvastatin 10 mg orally daily. His vital signs are stable, and his CrCl is 78 mL per minute. What is the best optimal anticoagulant regimen to initiate for this patient?
- Rivaroxaban 15 mg orally twice daily for 21 days, followed by 20 mg daily.
 - Edoxaban 60 mg orally daily.
 - Warfarin 2.5 mg orally daily.
 - Apixaban 5 mg orally twice daily for seven days, followed by 2.5 mg twice daily.
8. A 75-year-old male is admitted to the hospital for an acute DVT that is considered to be unprovoked. His CrCl is 28 mL/min, and labs upon admission include: Na 141 mEq/L, K 4.0 mEq/L, Cl 101 mEq/L, CO₂ 24 mEq/L, BUN 26 mg/dL, SCr 2.3 mg/dL, Glucose 110 mg/dL, Mg 2.0 mEq/L, Hgb 15.3 g/dL, Hct 47%, Platelets 301,000/mm³, PT 12.5 sec, INR 1.0.
- 8.1 Which of the following is/are considered to initiate therapy for this patient?
- UFH 80 units/kg IV bolus (5500 units), 18 unit/kg/hr infusion (1200 units/hr), and warfarin 5mg P.O. daily
 - Could use LMWH (enoxaparin), but would need to dose adjust for renal impairment: 1 mg/kg once daily.
 - Fondaparinux is contraindicated in patients with a CrCl < 30 mL/min
 - All of the above
- 8.2 On hospital day #2, the patient is discharged home on warfarin and enoxaparin. When should he follow up? What lab tests do you recommend?
- Follow-up in 2-3 days after discharge and have a PT/INR checked.
 - Follow-up in 7 days after discharge and have INR checked.
 - Follow-up will be two weeks after discharge, and a PT/INR will be checked.
 - Follow-up in 7 days after discharge and have a PT/INR checked.
- 8.3 How long does he need to continue on the enoxaparin?
- Continue for at least five days until the INR \geq 3 for 24 hours.
 - Continue for at least seven days until the INR \geq 2 for 24 hours.
 - Continue for at least five days until the INR \geq 2 for 24 hours.
 - Continue for at least ten days until the INR \geq 1 for 24 hours.
- 8.4 What are the adverse drug effects of enoxaparin?
- Bleeding
 - Thrombocytopenia
 - Skin hypersensitivity
 - All of the above
- 8.5 How long should this patient continue on warfarin therapy?
- At least one month; after one month, the patient should be evaluated for the risk-benefit ratio of extended therapy.
 - At least three months; after three months, the patient should be evaluated for the risk-benefit ratio of extended therapy.
 - At least six months; after six months, the patient should be evaluated for the risk-benefit ratio of extended therapy.
 - At least 12 months; after 12 months, the patient should be evaluated for the risk-benefit ratio of extended therapy.