

Week 1 Full Length Practice Exam Results

Score for this quiz: **150** out of 150

Submitted Jan 12 at 4:31pm

This attempt took 177 minutes.

Question 1

1 / 1 pts

A patient has been complaining of palpitations for the past week and presents to you at an urgent care clinic for evaluation. You perform a 12 lead EKG and identify atrial fibrillation with a hear rate of 122 beats per minute. What is your next order?

Apply a Holter monitor

Administer 5mg of warfarin

[Order a stat transthoracic \(2D\) echocardiogram and prepare the patient for trasnport to the closest appropriate hospital for inpatient evaluation](#)

A wearable monitor does not provide you with actionable information until it is read, and the patient is already identified as being in atrial fibrillation. Warfarin without bridging will take several days to achieve a therapeutic INR and without bridging (as it is not mentioned) would potentially increase prothrombotic state for first few days due to inhibition of protein C and S. Amiodarone is a rhythm conversion medication and should not be given unless first identifying any evidence of clot burden with an echocardiogram.

Administer 150mg of amiodarone IV bolus

Question 2

1 / 1 pts

Which of the following do not represent possible causes of a prothrombotic state?

[Inhibition of factor Xa](#)

Protein C and S are the body's natural anticoagulants and a deficit of these would make the patient more prone to clot. Factor V Leyden is a genetic mutation that makes the blood more prone to clot. Factor X when activated (Xa) is the beginning of stable clot formation. Inhibition of this would represent an anticoagulated state. (Oral anticoagulants such as rivaroxaban and apixaban use this mechanism).

Deficiency of protein S

Presence of factor V Leyden

Deficiency of protein C

Question 3

1 / 1 pts

An 80-year-old man with a history of atrial fibrillation presents with sudden-onset unilateral leg pain and pallor. What is the most likely diagnosis?

Deep vein thrombosis

Cellulitis

Correct Answer

Acute arterial occlusion

Peripheral artery disease

Question 4

1 / 1 pts

A 65-year-old woman presents for a follow-up examination. She is a smoker, and her hypertension is now adequately controlled with medication. Her mother died at age 40 from a heart attack. The fasting lipid profile shows cholesterol = 240 mg/dL, HDL = 30,

and LDL = 200. In addition to starting therapeutic lifestyle changes, the nurse practitioner should start the patient on:

bile acid sequestrant.

low-dose aspirin.

a cholesterol absorption inhibitor.

a statin drug.

Bile acid sequestrants and cholesterol absorption inhibitors may be useful in reducing ASVD risk, but for a patient who is an active smoker with premature coronary disease history (less than age 65 for women), has hypertension and is far from an LDL goal, this patient is most certainly a candidate for statin therapy, which represents the most aggressive therapy option of these four listed.

Question 5

1 / 1 pts

Your patient has been diagnosed with a 4.5cm ascending aortic aneurysm. Which medical imaging is considered standard of care for serial surveillance?

Transesophageal Echocardiogram

CT PE rule-out protocol

CT angiography of the chest

CT angiography is considered the standard of care for measuring vascular luminal dimensions with contrast. CT PE protocol is not timed properly for the aorta (it's timed for the pulmonary artery). Although a plain film is able to catch large aneurysms at times, they are not able to provide multi-axis reconstruction needed to accurately measure the size. Transesophageal echo

is not needed to accurately measure the aorta and requires the patient to undergo sedation which is unnecessary.

Plain film chest X-ray (CXR)

Question 6

1 / 1 pts

Preventive cardiac care should focus primarily on addressing all the following except?

Genetic predisposition

Smoking cessation, exercise, and medication compliance all represent modifiable risk factors and should be the focus of preventive care. Non-modifiable risk factors such as age, gender, genetic/family history should not be the primary focus of prevention.

Smoking cessation

Daily exercise

Medication compliance

Question 7

1 / 1 pts

The suggested International Normalized Ratio (INR) range in a patient being treated for atrial fibrillation is:

3.0-4.0

4.0-5.0

2.0–3.0

1.0-2.0

Remember that for international normalized ratio, the patient is their own normalization with an INR of 1.0 as the standard of untreated blood, so with an INR of 2.0, think of the patient as twice as thin for their blood as their normal. Protime can also be used to evaluate bleeding time for warfarin patients, but has in general been replaced many years ago by the INR as the standard measurement, where PTT (partial thromboplastin time) or Anti-Xa are more useful for evaluating bleeding times related to Heparin therapy.

Question 8

1 / 1 pts

While working in a fast-track clinic as a NP in an emergency department, your patient complains of shortness of breath with activity and near syncope with changing position from seated to standing on multiple recent episodes. You examine them and notice a harsh systolic murmur heard best at the right sternal border at the 2nd intercostal space rated 3/6, which has a bruit radiating to the right carotid artery. Of the following examinations, which is most appropriate or you to order next to evaluate this murmur?

CT non-contrast of chest, abdomen, pelvis

12 Lead EKG

[Transthoracic echocardiogram](#)

Patients with new findings of murmurs need to have their valves visualized in real-time with ultrasonography. This will show the valve restriction suggestive of aortic stenosis based on this presentation. Carotid ultrasound is valuable but the bruit heard on exam is likely radiating from the cardiac murmur. The CT scan is not going to provide information about the murmur and does not have any value in a diagnosis for rule out unless it has vascular contrast to rule out pulmonary embolism in the differential for shortness of breath. A 12 lead EKG although valuable is not able to provide data about the heart murmur.

Carotid ultrasound

Question 9

1 / 1 pts

Your patient admitted with crushing chest pain just converted from sinus rhythm to sinus bradycardia and developed elevated ST segments in lead II, III, and aVF. What intervention is the priority for this patient's care?

[Activating the cardiac cath lab team for STEMI](#)

Time is muscle. Early activation of the interventional cardiology team is key to long-term cardiac salvage in the setting of STEMI. SL nitro poses a risk for hypotension and further decompensation in a inferior/RCA territory MI. CT chest is not indicated as a priority in the presence of a cardiac-type pain with positive EKG findings. Although vasoactive support is possible, this is not the highest priority of care.

Stat CT chest to rule out aortic dissection

Administering sublingual nitroglycerin

Anticipating need for vasoactive support

Question 10

1 / 1 pts

As a f/u from a hospitalization an adult patient presents with ankle edema. Which of the following medications is the most likely cause of the edema?

Metformin

Nebivolol

[Norvasc](#)

HCTZ

The most common side effects of calcium channel blockers include constipation and lower extremity edema. The other options do not have any relationship specifically with edema, in fact, hydrochlorothiazide specifically reduces edema via diuresis.

Question 11

1 / 1 pts

A 60-year-old man presents with recurrent kidney stones, abdominal pain, and bone pain. Laboratory results show elevated serum calcium and low phosphate levels. What is the most likely diagnosis?

Hypercalcemia of malignancy

Osteoporosis

Hypoparathyroidism

[Hyperparathyroidism](#)

Parathyroid hormone increases serum calcium (reducing bony calcium concentration in the process) and explains why a patient is experiencing this clinical milieu.

Question 12

1 / 1 pts

A patient has a 3 cm pituitary mass noted on CT. What is your next step in evaluating the patient?

Refer to surgery

[Screen for hormone deficiencies](#)

Start Cabergoline

Repeat MRI in 3 months

Initial work up includes hormone testing. Cabergoline is the treatment for prolactinoma. Surgery consult is indicated when there are VF deficits and/or abutment/compression on optic nerves or chiasm or if adenoma is hyperfunctioning. Adenomas >1 cm with no VF deficit or abutment/compression of optic nerves or chiasm require a follow up MRI at 6 months.

Question 13

1 / 1 pts

Which of the following is at highest risk for type II diabetes?

An adult woman with a BMI of 34 who just delivered a baby weighing 10 lbs

A 77-year-old Caucasian male with a BMI of 27 who is sedentary

A 63-year-old Hispanic male with a BMI of 23 who works as a carpenter

A 51-year-old black female with a BMI of 22 who walks daily at least 30 minutes

Of these options, an adult woman with a BMI of 34 who just delivered a baby weighing 10 lbs is the most likely due to their increased BMI and the large size of the baby. giving birth to a large baby, also known as a large-for-gestational-age (LGA) baby, can increase the risk of developing type 2 diabetes later in life. Women who give birth to a LGA baby are 10% more likely to develop DMII 10-14 years after pregnancy compared to women who give birth to babies of average gestational age (AGA). This increased risk is even after adjusting for other risk factors, such as age, obesity, high blood pressure, and family history of diabetes.

Question 14

1 / 1 pts

Which of the following is the most common cause of Cushing's Syndrome?

Ectopic ACTH secretion

Adrenal adenoma

ACTH-producing pituitary adenoma

Long term excessive glucocorticoid use

ACTH-producing adenomas account for roughly 75% of Cushing's Syndrome, 15% due to ectopic ACTH secretion, and 10-15% are from adrenal adenomas.

Question 15

1 / 1 pts

A 35-year-old woman with a history of hypothyroidism presents with fatigue, weight gain, constipation, and cold intolerance. Her TSH level is elevated, and her free T4 is low. What is the most appropriate next step in management?

Order an antithyroperoxidase antibody test

Start methimazole

Increase levothyroxine dosage

Refer to an endocrinologist

Her clinical findings suggest she has not found a stable state (euthyroid) of her thyroid supplementation and an increased dose should be given to reduce her clinical findings of hypothyroidism. This is supported by her TSH being elevated and the T4 being low, both which support the patient not having enough thyroid to bring the TSH down to normal and the T3/T4 up to normal.

Question 16

1 / 1 pts

An adult female presents with a chief complaint of fatigue and weight gain. She states that she doesn't feel like herself. A diagnosis of hypothyroidism is suspected. Which of the following physical findings would support this diagnosis?

Diarrhea, tachycardia, and hypoactive deep tendon reflexes

Palpitation, bradycardia, and constipation

Dry skin, bradycardia, and hypoactive deep tendon reflexes

Tachycardia, exophthalmos, brittle hair

Dry skin, bradycardia, and hypoactive deep tendon reflexes are all fairly classic signs of hypothyroidism. To further substantiate these concerns, the patient should have their TSH and T3 and Free T4 checked, and it is likely their TSH would be elevated, T3/T4 low.

Question 17

1 / 1 pts

All the following are symptoms of hypocalcemia except:

Tetany

Paresthesia in fingers and toes

Visual field deficits

Abdominal pain

Visual field deficits is a potential symptom of pituitary adenoma. All other are symptoms related to hypocalcemia.

Question 18

1 / 1 pts

A starting dose for an elderly adult patient with a BMI of 20 needing levothyroxine

75 mcg

25 mcg

125 mcg

100 mcg

The widely considered best practice for treatment of hypothyroidism in the elderly is to "go slow and start low". 25 mcg is the most appropriate low dose to start with of these options. It is possible that over time the dose will be increased until therapeutic levels are obtained, but the risk of over-dosing the patient outweighs the desire to quickly achieve this state.

Question 19

1 / 1 pts

An adult female who recently returned from a business trip to Japan presents for a recheck appointment. The only remarkable laboratory result is for thyroid-stimulating hormone (TSH), at 0.3 microunits/mL (normal = 0.4–6 microunits/mL). The patient reports that her neck hurts; examination reveals thyroid tenderness. Which of the following laboratory tests should the nurse practitioner order now?

Triiodothyronine (T3) only

Triiodothyronine (T3) and free triiodothyronine (FT3)

Triiodothyronine (T3) and free thyroxine (FT4)

Triiodothyronine (T3) resin uptake assay

The patient has a low TSH which when paired with elevated T3 and T4, suggest hyperthyroidism. The next steps for this patient are to check the T3 and T4 levels which would presumably be high and clinically correlate the findings for a diagnosis of hyperthyroidism.

Question 20

1 / 1 pts

A patient is evaluated in the urgent care for complications of Type 2 diabetes due to an episode of recent life stressors. All the following are consistent with HHS except:

Urine osmolality 380 mOsm/mL

Markedly positive serum ketones

Arterial pH 7.6

BS= 850 mg/dL

HHS presents with severe hyperglycemia with BS >600 and pts are more dehydrated. Ketosis is more common in DKA. Hyperosmolality is the hallmark of HHS, and the urine osmolality is typically 350-380 mOsm/mL and in DKA typically have elevated plasma osmolality. Arterial pH is suppressed in DKA <7.3 and is >7.3 in HHS

Question 21

1 / 1 pts

How should a nurse practitioner evaluate if palliative care is effective?

An out of hospital "Do not resuscitate" order is in place.

Advanced directives have been discussed and signed.

The illness or disease is in remission.

Correct Answer

The symptoms causing discomfort are lessened.

Palliative care consults are performed for patients who have a near terminal condition with a very minimal anticipated. Duration of life left, typically 14 days or less it does not mean a sensation of treatment, but it does focus the treatment on their quality of life to be prioritized.

Question 22

1 / 1 pts

A 90-year-old female is brought to the clinic by her neighbor. She states that everything is fine, but the nurse practitioner notes that she has poor hygiene and bruises on her trunk. The neighbor is concerned that the patient often has no money to buy food, despite income from social security and a coal miner's pension. The nurse practitioner suspects abuse. Which of the following is the nurse practitioner obligated to do next?

Report the case to the proper authorities.

Call the patient's family and inquire about the concerns.

Tell the neighbor to check on the woman daily and report back.

Document the data and report the information to risk management.

Remember, that suspected abuse is always a reportable event and therefore should be the right answer you gravitate toward on any question that suggest that there is any type of actual or suspected elder abuse.

Question 23

1 / 1 pts

An elderly patient diagnosed with end-stage lung cancer has been refusing meals, opting instead for ice cream only. The family is concerned about the patient not getting enough nutrition. The NP:

order a U/A and CBC

screens the patient for depression

prescribe methylphenidate for appetite stimulation

explains loss of appetite is common at the end of life

Death is an uncomfortable topic, and must be handled tactfully. Factual re-orientation to the terminal state of a patient's condition may be appropriate when unrealistic expectations for their longevity have been voiced. The reasonable choice in this case is to describe the normalcy of what the patient is experiencing with their loss of appetite and their terminal state. Testing the patient for depression has really no clinical bearing on this particular time nor does prescribing methylphenidate. Ordering a UA and CBC would suggest a concern of a urinary tract infection, and that is not a likely scenario to describe the patient's existing condition. Support the patient as his advocate by helping the man enjoy the ice cream he requested.

Question 24

1 / 1 pts

A 92-year-old presents with a decline in personal care and increasing forgetfulness. They had a CVA a three years ago with mild cognitive changes then which has slowly progressed. The more likely diagnosis in this case is?

Lewy-body dementia

Mini-strokes

Alzheimer's dementia

Progressive vascular dementia

Question 25

1 / 1 pts

A frail elderly patient presents with constipation. Which of the following normal physiologic changes seen with aging is the most likely cause?

Decreased pancreatic secretions

Increased absorption of calcium

Decreased bowel muscle tone

Increased bile secretion

The frail, elderly patient will typically have their GI track decrease bile secretion and decrease absorption of calcium. A decrease in pancreas secretions is not related to presence of constipation, however, decreased bowel muscle tone certainly does reduce the GI motility and increase the transit time, thereby increasing the drying of stool in the large intestine which leads to constipation

Question 26

1 / 1 pts

An adult presents with increasing abdominal girth. The nurse practitioner suspects ascites. Which finding on physical exam would confirm the suspicion of ascites?

Dullness does not shift to the dependent side

In a fluid wave test, tympany shifts to the bottom

An impulse is not easily palpable

Dullness shifts to the more dependent side

In the fluid wave test for ascites, dullness shifts to the more dependent side. The impulse of the wave should be easily palpable.

Question 27

1 / 1 pts

A 39-year-old female is being seen by your service for diarrhea. Patient reports 3-4 loose stools a day. She also reports mild cramping. The patient's stool culture was negative, her fecal occult and ESR were elevated. Which lab would be important to also test if you are suspecting IBD?

Fecal calprotectin

CRP

CBC, CMP

D-Dimer

Fecal calprotectin which is a biomarker tends to be higher and is associated with active inflammatory bowel disease such as Crohn's and ulcerative colitis.

Question 28

1 / 1 pts

A 70-year-old patient presents to the clinic with dyspnea, palpitations, and fatigue. The patient reports a 2-week history of blackened stools, which the patient attributes to

drinking berry juice. Assessment reveals vital signs of BP = 110/60, P = 100, R = 24; Hgb = 4.5 g/dL; Hct = 16%. What is the most appropriate immediate intervention?

Order serum iron, total iron-binding capacity (TIBC), and ferritin.

Refer to a gastroenterologist.

Send to the emergency room.

Order a complete blood count (CBC) with differential.

This patient is experiencing a GI bleed and is in need of emergency treatment due to their considerably low hemoglobin.

Question 29

1 / 1 pts

A 28-year-old woman presents with abdominal pain, diarrhea, and weight loss. She also reports occasional bloody stools. Colonoscopy reveals continuous inflammation from the rectum extending proximally. What is the most likely diagnosis?

Diverticulitis

Crohn's disease

Correct Answer

Ulcerative colitis

Celiac disease

The presence of inflammatory bowel disease which is present in the patient with bloody stool suggests ulcerative colitis. This patient should be acutely managed with steroids and chronically with auto-immune therapy such as biologics and/or DMARDs.

Question 30

1 / 1 pts

A 29-year-old male presents with severe abdominal pain, he has a history of alcohol abuse, and recurrent pancreatitis. Patient's Lipase is elevated, and he has nausea and vomiting as well. Abdominal CT shows inflammatory changes around the pancreas. What is the most important intervention to consider in the acute phase?

Feeding patient to reduce risk of necrosis

Admit to the hospital for fluid resuscitation to avoid hypovolemic state, and reduce risk of developing further complications

Pain management with IV narcotics

Further imaging and diagnosis with EUS and aspiration for development of necrosis

Attention to adequate fluid resuscitation should be the priority in addressing abdominal pain, as hypovolemia from vascular leak and hemoconcentration can cause ischemic pain and resultant lactic acidosis. Although Pain should be managed, and patients' needs feeding typically via NG to avoid development of necrosis. These are not the top priorities.

Question 31

1 / 1 pts

The most specific indicator of the presence of ascites is:

A liver scratch test

A positive Murphy test