

Question 1

1 / 1 pts

Your 53 year-old female patient is experiencing shortness of breath and has a diagnosis of pulmonary arterial hypertension. Which ventricle is directly experiencing increased afterload from this disease state?

Neither Left or Right

Ventricles **Right Ventricle**

Both Right and Left Ventricles

Left Ventricle

Rationale: Understanding the flow of blood through the body is necessary to answer this question. The circuit of blood immediately prior to the pulmonary artery is the right ventricle. The left ventricle will not receive an increase in afterload from this, but may increase in preload.

Question 2

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An example of secondary prevention for a diagnosis of coronary artery disease includes which of the following?

Practicing yoga and meditation to reduce stress

Coronary artery bypass grafting

LDL decreasing from 120 to 98 with healthy diet

Controlling hypertension

CABG represents the only guaranteed evidence of fixing patients who already have coronary artery disease. The rest remain as primary prevention strategies.

Question 3

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Which of the following antibiotic agents should be avoided in a 35 year-old female patient with a diagnosis of Marfan's Syndrome?

Metronidazole

Sulfamethoxazole-trimethoprim

Ciprofloxacin

Ceftazidime

Fluoroquinolone antibiotics must be avoided for patients with connective tissue disorders due to the risk of aneurysm associated with their use. Ciprofloxacin is the only fluoroquinolone antibiotic listed.

Question 4

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A 60-year-old man with a history of hypertension and diabetes presents with a new-onset headache and visual disturbances. His blood pressure is 200/110 mmHg. What is the most appropriate management?

Advise dietary changes

Refer to the emergency department

Start insulin therapy

Prescribe antihypertensive medication and follow up in a week

Question 5

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As the nurse practitioner on call on at a long term care facility, a nurse calls you to notify you that your patient who was in normal sinus rhythm has started to have extra premature beats noted on bedside telemetry. The nurse states these extra beats occur approximately every 6 normal beats and has an inverted p wave located after the narrow QRS complex which appears otherwise identical to the normal sinus rhythm QRS complex. What is this nurse likely describing?

Premature Junctional Contractions

Premature Atrial Contractions

Sinus Exit Block

Premature Ventricular Contractions

Sinus exit block does have a pause, but no change in P wave morphology. PACs will maintain an early but otherwise normal P wave/QRS. PJC's will have absent, inverted or retrograde P waves(after the QRS) and be otherwise narrow complex QRS. PVC's will be absent of any P wave and have a wide complex QRS.

Question 6

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Effective long-term treatment of systolic heart failure with reduced ejection fraction should include which of the following?

Prescribing 500 ml fluid bolus for hypotension

Prescribing valsartan/sacubitril (Entresto) unless contraindicated on discharge

Prescribing midazolam to aid with air hunger

Auscultating lung sounds for rhonchi

Angiotensin Receptor and Neprilysin Inhibition is considered goal-directed therapy for patients with reduced systolic heart function as evidence by the PARAGON-HF Trial. Auscultation is an assessment item, not a treatment. Midazolam does not have any long term benefit for heart failure. Fluid bolus in a patient with likely fluid overload from systolic heart failure only worsen their presenting symptoms.

Question 7

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The use of sublingual nitrates for patients with chest pain is relatively or absolutely contraindicated in all the following scenarios except:

Profound hypotension

Uncontrolled hypertension

Concomitant use with phosphodiesterase inhibitors

Use during right coronary artery territory STEMI

Hypertension does not contraindicate the use of nitrates. Use of phosphodiesterase inhibitors such as sildenafil may cause a precipitous drop in blood pressure, as would their use with patients relying on diastolic filling pressure in RCA territory STEMI. Profound hypotension is an absolute contraindication.

Question 8

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Your patient with a history of two coronary stents and a LDL of 190 has been started on lipid-lowering statin therapy on three separate attempts with considerable side effects such as leg pain and in one event, hospitalization for rhabdomyolysis. Which is the best option moving forward to manage their lipids?

Reattempt statin therapy

Initiate PCSK9 Inhibitor

therapy Aspirin 81mg daily

Use ezetimibe as monotherapy

Aspirin is not considered a lipid lowering agent. History of statin-induced rhabdomyolysis is a contraindication for further statin attempts. Ezetimibe as monotherapy does not provide any appreciable decrease in LDL to goal of <100 for proven CAD (patient has stents in place). PCSK9 Inhibitors are the best available drug class for this patient.

Question 9

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A 45-year-old man presents with intermittent chest discomfort and shortness of breath that occurs during physical activity and resolves with rest. He has a history of hypertension. Which diagnostic test is most appropriate to evaluate his cardiac function and assess for possible structural heart disease?

Cardiac MRI

Echocardiogram

Electrocardiogram (ECG)

Chest X-ray

Question 10

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Your patient is complaining of paroxysmal atrial fibrillation. Which medical procedure is commonly used to treat this condition?

Radio frequency ablation of the left ventricular apex

Cryoablation of the transition zone of the left pulmonary vein inflow to the left atrium

Placement of biventricular pacing

Overdrive pacing via an epicardial lead

The transition zone of pulmonary vein to left atrium represents the most common source of atrial fibrillation and is commonly treated with scarification, radio frequency ablation, or cryotherapy to impede the electrical stimulation of a-fib to the rest of the atrium.

Question 11

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A 27-year-old woman presents with frequent headaches, galactorrhea, and amenorrhea. MRI of the brain reveals a pituitary adenoma. What is the most appropriate initial treatment?

Dopamine agonists

Radiation therapy

Surgery

Corticosteroids

Dopamine agonists are commonly used to initially counteract the effects of pituitary adenomas. Surgery or radiation may be used as an eventual destination therapy, however the question specifically asked about the initial management.

Question 12

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An adult patient with type 2 diabetes mellitus returns at the nurse practitioner's request to discuss medication management. Current medications include metformin (Glucophage), 1000 mg twice daily, sitagliptin (Januvia), 10 mg daily, and insulin detemir (Levemir), 60 U daily. Lab values are: A1c = 10.4% [normal = less than 7.0%], fasting blood glucose = 180-190 mg/dL range [normal = less than 99 mg/dL]. Which of the following regimens should the nurse practitioner recommend?

Switching to glargine (Lantus)

Basal and rapid-acting insulin

Basal insulin only, continuing oral medications

Rapid-acting insulin only, continuing oral medications

For a patient who is uncontrolled on oral management for diabetes with an A1c of 10.4% and a fasting glucose of 180 to 190, this patient needs a rapid acting insulin added to their regimen of a long acting basal insulin. The other options are incorrect because adding basal insulin only and continuing oral medication has not yet been effective for this patient. Switching to glargine from detemir does not likely suggest any change since both are long acting insulin. Switching to rapid insulin only and stopping long acting insulin would certainly be a step in the wrong direction, correct option to use basal and rapid acting insulin for this patient who is not controlled in their blood sugars, despite multiple oral agents and a baseline of acting insulin.

Question 13

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A patient has a 2 cm pituitary adenoma on MRI. Deficiency of one of the pituitary hormones can cause immediate hemodynamic instability and has a risk of death. Which is the most critical hormone deficiency to rule out?

Prolactin

TSH

ACTH

FSH/LH

Adrenal crisis is a life-threatening emergency and needs to be ruled out. Unrecognized/untreated adrenal insufficiency can result in death. ACTH is the pituitary hormone responsible for cortisol production.

Question 14

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A patient is having increased thirst and urination. You have ruled out diabetes mellitus. After a complete history and physical you suspect diabetes insipidus. Your initial lab tests should include?

Plasma sodium, 24-hour urine osmolality and volume

Recording Intake and output

Plasma sodium and renal US

Renal US and 24-hour urine for volume

Initial work up includes plasma sodium and 24-hour urine for osmolality and volume. Renal US not indicated.

Question 15

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An adult male is seen for an initial visit. He denies tobacco, drug, or alcohol use. He has a sedentary lifestyle and no family history of diabetes. BP = 120/80, P = 76, and BMI = 31. Which of the following diabetes screening tests should the nurse practitioner order?

No screening is indicated until age 45

Fasting plasma glucose

Basic metabolic panel

Urine for glycosuria

With a sedentary lifestyle, a BMI of 31, on an initial visit establish a baseline, a fasting glucose is an appropriate response to specifically evaluate the diabetes screening for this patient.

Question 16

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A 60-year-old woman presents for a routine check-up. She has a history of hypertension, type 2 diabetes mellitus, and hyperlipidemia. She is currently on lisinopril, metformin, and atorvastatin. She has no new complaints. On examination, her blood pressure is 135/80 mmHg, heart rate is 72 beats per minute, and BMI is 32 kg/m². Recent laboratory tests reveal HbA1c of 7.5%, LDL cholesterol of 110 mg/dL, and creatinine of 1.1 mg/dL. What is the most appropriate management plan to optimize her care?

Increase the dose of atorvastatin

Recommend lifestyle modifications including diet and exercise

Increase the dose of lisinopril

Increase the dose of metformin

Although all these are potential options to consider, the loss of weight is most likely to affect all of her issues and should be considered as the first therapy before adding additional medications, especially as she is already on 3 agents, yet her BMI of 32 suggests she is obese.

Question 17

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An adult patient presents with tachycardia and nervousness. The patient is currently taking levothyroxine (Synthroid), 75 mcg daily. The nurse practitioner orders a thyroid-stimulating hormone (TSH) and anticipates having to:

add atenolol, 50 mg daily.

lower the dose to 50 mcg daily.

raise the dose to 100 mcg

daily. continue the same daily

dose.

The patient is presenting with symptoms of hyperthyroidism, and since they are being supplemented with levothyroxine for hypothyroidism, it's suggestive that they are overdosing and their dose should be decreased. The only option that is appropriate is to lower the dose to 50 mcg daily, and although adding a 50 mg daily dose of propranolol may be helpful to manage symptoms for a hyperthyroid patient, this hyperthyroid presentation is related to overmedication.

To evaluate this more directly, the patient should have a TSH and T3/T4 level drawn and it is likely we would find the TSH is low, T3 and T4 are elevated.

Question 18

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A 33-year-old woman presents with irregular menstrual cycles, hirsutism, and obesity. Laboratory tests reveal elevated serum testosterone and LH ratio > 2:1. What is the most appropriate initial treatment?

Oral contraceptives

Clomiphene

Spironolactone

Metformin

These are classic symptoms of polycystic ovarian syndrome and the patient should be treated with oral contraceptives to help stabilize their estrogen and progesterone. Additionally, they may be managed on metformin and/or spironolactone for their PCOS.

Question 19

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An adult female recently returned 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) resin uptake assay

D Triiodothyronine (T3) and free triiodothyronine (FT3)

Triiodothyronine (T3) only

Triiodothyronine (T3) and free thyroxine (FT4)

low TSH is suspicious of hyperthyroidism with a corresponding finding of elevated T3/T4 and clinical symptoms of a goiter, tremulousness, anxiety, palpitations, weight loss, insomnia, diarrhea, etc. This patient is describing a sore neck as well, suggestive of Graves disease

Question 20

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An adult patient diagnosed with type 2 diabetes mellitus presents for a recheck. The patient follows a carbohydrate counting diet and walks 30 minutes 5 times weekly. Current fasting blood glucose = 116 mg/dL [normal = less than 99 mg/dL] and A1c = 6.3% [normal = less than 7.0%]. In accordance with the American Diabetes Association, the nurse practitioner would recommend that the next follow-up appointment be scheduled for:

- 1 year.
- 9 months.
- 6 months.
- 2 months.

Based off of the ADA recommendation, this patient should be evaluated in six months. If there compliance was worse or they were not controlled with their A1c, this would likely be a three month follow up.

Question 21

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

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

The symptoms causing discomfort are lessened.

Advanced directives have been discussed and signed.

The illness or disease is in remission.

Question 22

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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?

Document the data and report the information to risk management.

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

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

Report the case to the proper authorities.

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

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Which is best performed to assess the risk for fall in an 88-year old adult?

Global screening assessment

Get up and go test

Clock-drawing

test

PHQ-2 questionnaire

Question 24

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The management of COPD in the elderly is best guided by:

arterial blood gases.
radiologic imaging.
symptomatology.
spirometry.

Question 25

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Which of the following gastrointestinal changes is associated with normal aging?

Decreased production of gastric acid
Increased esophageal emptying
Increased salivation
Decreased incidence of gallstones

Question 26

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A patient states that his girlfriend was recently diagnosed with hepatitis, and he tests positive for hepatitis C. He expresses fear of the diagnosis because his father died after a liver transplantation. Which existing information in the patient's history is the most significant factor in the progression of liver failure?

intermittent acetaminophen intake
chronic alcohol intake
Lack of fluid intake
Lack of exercise

Question 27

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An older adult patient with new onset GERD, cough, heartburn. Initial tx

H2 receptor antagonist
PPI
Antacid and lifestyle modification/weight loss
Sucralfate

Before initiating a PPI or H2RA, it would always be wise to initiate diet/exercise and symptom management when present with an antacid. Loss of weight/dieting is most likely to deal with obesity as the most common underlying cause of GERD.

Question 28

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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?

Admit to the hospital for fluid resuscitation

Pain management with IV narcotics

Feeding patient to reduce risk of necrosis

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 29

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A 38-year-old male presents to the clinic with complaints of abdominal pain, intermittent diarrhea, and has a positive occult blood. A stool culture is done which does not show any organism growth. Which labs could be performed to provide further diagnostic information?

CRP and Fecal calprotectin

CEA

Sed rate

CMP

CRP and fecal calprotectin, are typically performed, if elevation is seen in these two levels, then an ileocolonoscopy is warranted for further workup and biopsy

Question 30

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A geriatric female presents with complaints of dyspnea and fatigue. All blood work is normal except for Hgb of 9.0 g/dL, Hct of 33%, and guaiac positive stool. The patient also reports a bowel pattern of alternating constipation and diarrhea, and frequent laxative use. Which diagnostic tests should be ordered?

CT scan of abdomen

MRI scan of abdomen

Colonoscopy

Upper GI series

This patient is in need of a colonoscopy to evaluate for the cause of occult bleeding.

Question 31

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The most specific indicator of the presence of ascites is:

A positive Murphy test

A liver scratch test

A prominent fluid wave

Costovertebral angle tenderness

During assessment for ascites, a fluid wave test should produce a prominent fluid wave if the patient is experiencing ascites.

Question 32

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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?

CRP

Fecal

calprotectin D-

Dimer

CBC, CMP

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 33

1 / 1 pts

An adult female presents with profuse, watery diarrhea and loss of appetite for the past 5 days with 4-5 stools per day. Stool cultures are positive for C Diff. Patient cannot afford Vancomycin. The most appropriate antibiotic is:

Augmentin

Doxycycline

Metronidazole

Bactrim

The only option listed which will effectively manage C Diff is metronidazole (Flagyl)

Question 34

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If the history, physical examination, and liver function tests of a 50-year-old patient suggest biliary tract obstruction, the preferred image modality is:

- Nuclear scintigraphy
- MRI with contrast
- Flat plate of the abdomen
- Ultrasonography**

Ultrasound is a well tolerated painless exam to evaluate for solid or fluid-filled organs.

Question 35

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A 42-year-old female presents with large watery frequent stools. She also reports abdominal pain and cramping, bloating and gas. What is the primary management for this patient?

- Upper and lower endoscopy for further evaluation
- Antibiotic treatment
- Probiotics and antibiotic treatment
- Fluid and electrolyte management, self-limiting**

Since this patient is likely presenting with a small intestine diarrhea, this tends to be self-limiting and viral in nature. Management tends to focus on supportive care, fluid replacement, and electrolyte replacement

Question 36

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Your irate patient on involuntary hold due to risk of harm to themselves or others says they are going to “kill you when you leave work after they get discharged”. This statement is an example of which of the following?

- Verbal battery
- Emotional battery
- Verbal assault**

Assault refers to the risk of a harm to others, whereas battery refers to the actual act of that harm.

Question 37

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In a mass casualty situation with presumed anthrax exposure, the drug of choice for prophylaxis is:

tetracycline (Achromycin).
chloramphenicol (Chloromycetin).
amoxicillin (Amoxil).
doxycycline (Doryx).

When dealing with prophylactic exposure, the most appropriate medication for anthrax would be doxycycline per the CDC guidelines.

Question 38

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Which of the following refers to the primary access point of medical care patients are encouraged to use to aid in providing continuity and reduction of cost per the Affordable Care Act?

The Medical Home

Consulting Healthcare Providers

Urgent Care

The Emergency Department

The medical home reduces cost by providing continuity of care, reducing overtesting, duplicate testing, and aids with longitudinal management of the patient. The other options all increase these cost-burdening elements and should be avoided unless care through the medical home is not a reasonable or appropriate option.

Question 39

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A patient states they do not want to have any further medical care and wishes to leave against medical advice. Unknown to you, the healthcare tech then held their arm down to get an IV catheter placed against their will. The healthcare tech is at risk of being charged with which of the following:

None of these options

Verbal battery

Verbal assault

Battery

Assault refers to the risk of a harm to others, whereas battery refers to the actual act of that harm.

Question 40

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Which of the following is an example of implied consent?

The patient has an emergency department visit for a pneumothorax and discusses the risks and benefits before receiving a chest tube thoracostomy.

The patient with altered mental status has acute respiratory distress and two providers agree they need to be intubated in the absence of a healthcare surrogate or power of attorney present.

The patient has a scheduled surgery next week and discussed risks and benefits with the surgeon in a pre-operative visit.

The patient collapses while having a myocardial infarction in the hospital cafeteria. Bystanders witnessed the patient clutch his chest, say "my chest", then collapse. They start CPR and initiate the emergency care system to transport the patient for care in the emergency department.

Surgical consent is by definition "informed" when the risks and benefits are discussed as with the patients undergoing surgery and a chest tube, and 2 person emergency consent is described with the patient with altered mental status. The collapsed patient reflects a clear inability to care for oneself and care is being performed under the assumption of what is implied as what any reasonable person would want.

Question 41

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A young adult presents with a sore throat, nasal congestion, postnasal drip, no temperature elevation, and no lower respiratory involvement. The most appropriate initial intervention is to:

Obtain a Monospot test

Recommend gargling with warm salt water

Prescribe a prophylactic course of oral penicillin

Obtain a nasopharyngeal culture and sensitivity

Non-infectious rhinosinusitis is best treated without antibiotics unless symptoms persist for over 10 days and there is a systemic response, such as fever, chills, malaise, productive cough, etc. Gargling with warm salt water will help the patient reduce swelling, and the presentation should self-limit.

Question 42

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Which of the following is not one of the four Ds of epiglottitis?

Dystonia

Dysphonia
Dysphagia
Drooling

Dystonia is not one of the four Ds of epiglottitis. It's an extrapyramidal symptom.

Question 43

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Patients presenting with globe rupture should be sent to immediate surgery due to which of the following reasons?

Pain associated to the traumatic event is less when surgery is performed immediately

Rapid surgery can increase incidence of endophthalmitis

Loss of vision is worse if surgery is immediate

Delay in surgery can increase incidence of choroidal hemorrhage

Delay in surgery can increase incidence of both choroidal hemorrhage as well as endophthalmitis. Loss of vision is likely less if surgical intervention is immediate for the same reasons as above and pain due to the trauma itself has no bearing on surgical timing.

Question 44

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A 35-year-old woman presents with allergic rhinitis, experiencing significant nasal congestion, sneezing, and itchy eyes. She has tried over-the-counter antihistamines with limited relief. What is the most appropriate next step in management?

Oral decongestants

Referral to an allergist for immunotherapy

Intranasal corticosteroids

Nasal saline irrigation

Question 45

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A 19-year-old presents with a sore throat and anterior cervical adenopathy. Which causative agent would be suspected?

Adenovirus

Epstein-Barr virus

Haemophilus influenzae

Group A beta-hemolytic Streptococcus

While this patient could easily represent strep or EBV, the differentiating factor is the location of the affected lymphadenopathy. As a generalization, posterior cervical lymphadenopathy is