

QUIZ 3

An adult patient is being evaluated for secondary causes of hypertension due to resistant blood pressure and an onset of high blood pressure at an earlier age. He reports no family history of hypertension. Which of the following mechanisms can cause secondary hypertension?

Group of answer choices

Increase in parathyroid

hormone **Elevated aldosterone levels**

Increased secretion of

insulin

Decreased release of natriuretic peptides

A patient is evaluated for newly diagnosed hypertension. Which vessel type is a major determinant of systemic blood pressure?

Group of answer choices

Large arteries

Capillaries

Venules

Arterioles

An adult patient undergoes coronary balloon angioplasty to treat symptoms of unstable angina. Following the angioplasty procedure, the patient is at risk of restenosis due to a specific cellular response characterized by cell migration and proliferation within the vessel wall. Which type of cell is predominantly involved in this process?

Group of answer choices

Fibroblasts

Endothelial cells

Macrophages

Vascular smooth muscle cells

A young man with Marfan syndrome presents to the emergency department with sudden, sharp chest pain radiating to the back. Imaging studies reveal an intimal flap in the ascending aorta and a false lumen with differential flow. Which of the following histologic features of the aortic wall most likely predisposed this patient to the described condition?

Group of answer choices

Thinning of the tunica media due to reduced elastin fibers

Calcification of the tunica externa

Overgrowth of smooth muscle cells in the tunica media

Thickening of the tunica intima due to increased collagen

An older adult man with a history of hypertension is brought to the emergency department by his family due to a sudden onset of chest pain that started 1 hour ago. If this is diagnosed as a myocardial infarction, which statement regarding the state of myocardial tissue is most accurate?

Group of answer choices

Most of the myocardial tissue affected has probably reached irreversible damage. The affected myocardial tissue has already started to regenerate.

The affected myocardial tissue shows minimal signs of ischemia and is not at risk for necrosis.

Most of the affected myocardial tissue is likely still in the ischemic phase and can be mostly salvaged with prompt intervention.

An older adult man with a recent history of prolonged immobility following a hip replacement surgery presents to the clinic complaining of unilateral swelling, warmth, and pain in the left leg. On