Diagnosis and Treatment of Peripheral Artery Disease (PAD) In Interventional Radiography

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Peripheral Artery Disease (PAD) is a narrowing of the peripheral arteries which supply blood to the legs, arms, stomach, and heart. This narrowing occurs due to atherosclerosis, which is the buildup of plaque or fat on the walls of the blood vessels. Atherosclerosis results in the restriction of blood flow to the desired site, which is most often the legs. The most common symptoms for PAD are cramps or pain in the leg when walking, which subsides during periods of rest. A brachial-ankle index test can be administered to monitor the blood pressures in the upper and lower limbs to evaluate any abnormalities. The most likely risk factors for being diagnosed with PAD are smokers, diabetes, and high blood pressure or high cholesterol. PAD is diagnosed through a lower extremity angiogram, typically through the femoral or iliac arteries. Contrast is administered through the vasculature to identify areas that are blocked or narrowed. Balloon catheters are inserted into blood vessels to open blockages and stenting can be placed to ensure further issues do not occur. Prevention of PAD includes frequent exercise to reduce claudication, dietary changes to reduce cholesterol, administration of medications, and quitting smoking.