

History & Physical Examination of Cardiovascular system

Hx and PEx of “Vascular Symptoms”

1- Overview:

1- Intermittent Claudication:

Pain in one or both calves, thighs or buttocks during walking more than a certain distance (the claudication distance).

2- Critical Limb Ischemia (Rest Pain):

Continuous unremitting pain caused by severe ischemia.

3- Acute Limb Ischemia

Sever sudden abrupt leg pain with inability to walk, the pain that increases in severity with every hour and another, it results from sudden obstruction of the arterial system.

4- Varicose Vein

Dilated, tortuous vein

Arterial diseases usually don't cause edema. Edema only caused by veins and limaphytics diseases.

Venous swelling usually painful but lymphatic pathology swelling is painless

Differential diagnosis:

DDx: Pain	What supports the diagnosis	
<p><u>Chronic Limb Ischemia</u> Intermittent Claudication (Most Common)</p>	<p><u>Typical Symptoms:</u> Pain during walking more than a certain distance and relived by rest.</p> <p><u>Complication:</u> Critical limb ischemia, Ulcer, Gangrene.</p>	<p><u>Risk Factors:</u></p> <ul style="list-style-type: none"> • Cigarette Smoking • Hypertension • Diabetes • Hypercholesterolemia • Male gender and Old age
<p><u>Critical limb ischemia</u> (Rest pain +/- tissue loss)</p>	<p><u>Typical Symptoms:</u> pain present at rest throughout the day and the night usually experienced in the most distal part of the limb, namely the toes and forefoot.</p> <p><u>Complication:</u> Ulcer (tissue loss), Gangrene.</p>	
<p><u>Acute limb ischemia (6Ps)</u></p>	<p><u>Typical Symptoms:</u> sever SUDDEN onset of diffuse and poorly localized leg pain becomes more sever every hour and another.</p> <p><u>Complication:</u> Ulcer (tissue loss), Gangrene.</p>	

History

a. Intermittent claudication or critical limb ischemia. (Arterial).

Questions:

Indication:

Pain (SOCRATES)

Site

Where is the Pain?

To know which muscles are involved:

- Calf * Most common → superficial femoral artery is affected.
- Thigh & gluteal region → Iliac artery is affected

Onset

Do you get the pain on walking or exercise or is it sudden pain?

Pains that begin when at rest or immediately the patient stands up, and that do not abate with rest are **not claudication pains. It's more likely to be critical limb ischemia.**

Is the pain getting worse or it's improving?

Acute limb ischemia pain becomes more severe over each hour.

Character

Can you describe the pain?

Intermittent claudication begins as ache in the muscles of the leg, which then becomes a cramp and then stops them walking any further.

NO Radiation

Association	
Is there any swelling?	Edema usually is not there in arterial problem.
Time	
Time course of the pain + time to recover?	
Exacerbating/Relieving Factors	
What aggravates the pain?	Intermittent claudication aggravated by movement, walking
What relieves the pain?	Intermittent claudication → relieved by rest Rest pain → relieved by putting the leg below the level of the heart
Have you tried any analgesic drugs that give relief?	
Severity	
Does the pain affects your life style?	
How far can you walk before the pain begins?	Claudication distance
Is the pain so bad that you have to stop walking?	
When you stop walking how long does the pain take to get better?	
Is there any pain in the limb at rest?	** Its presence signifies the onset of critical limb ischemia.
Can you walk through pain?	
Limitation of movement?	

Only if you suspect limb ischemia don't forget to ask the 6Ps

• **Pain**

• **Pallor**

- (Color of legs) Are there color changes in the skin, particularly in response to a cold environment?

• **Paraesthesia**

- (Numbness in leg) Do you experience any tingling or numbness in the limb?

• **Poikilothermia**

- (Cold legs), Are the extremities of the limbs cold?

• **Pulselessness**, and the limb feels **this is a sign**

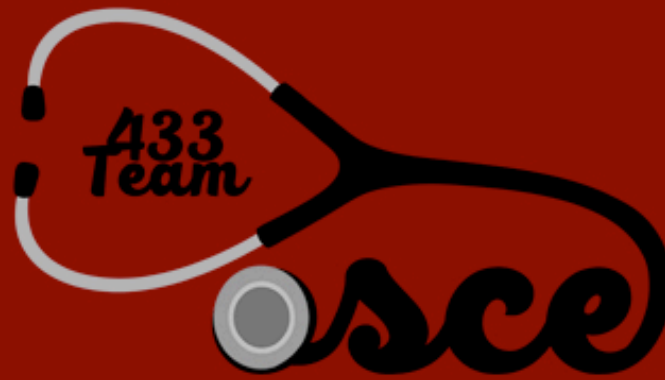
• **Paralysis.**

Risk Factors of Atherosclerosis: ***

- Smoking
- DM
- HTN
- Hypercholesterolemia
- Sedentary life style
- Previous MI or angina
- Stroke or TIA

Others

Past medical history	Ask about the diseases that mentioned with the risk factors, and ask specifically about cardiac or vascular diseases.
Family history of ischemic heart disease	Arterial disease is often familial, so it is important to ascertain the cause of death of parents and siblings and whether they had any symptoms of vascular disease (Heart, brain, legs clots).



Done By :

Yazeed Al-Harbi
Fadah Al-Anazi
Mohammed Al-Shehri
Waleed Al-Rajban