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Peer / Tutor Vascular Examination Checklist

1	**Introduction**	
	- Introduce yourself - Ask permission to examine patient - Expose both legs	☐ ☐ ☐
2	**Inspection**	

	- Around the bed:
	  o *Walking aids*
	- General inspection of legs
	  o *Scars, skin changes, colour, hair loss, ulcers*
	- Closer inspection of feet
	  o *Lateral side of foot, head of first metatarsal, heal, malleoli, toes and in between toes*
	- If ulcer present
	  o *Location, size, shape, depth, edge, base and signs of infection (redness or discharge)*
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3	**Palpation**	

	- Temperature: run the back of your hand along both limbs. Compare both sides – warm/cold?
	- Cap refill: press the tip of the nail for two seconds and count the number of seconds taken for the nail to become pink again
	- Pulses: Feel pulse bilaterally:
	  o *Femoral- midway between pubic symphysis and ASIS*
	  o *Popliteal- feel behind a flexed knee using fingers*
	  o *Dorsalis pedis- felt along the cleft between first two metatarsals*
	  o *Posterior tibial arteries; half way along the line between medial malleolus and the heel prominence*
	  o *Aorta- midline for expansile & pulsatile mass*
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4	**Auscultation**	
	- Listen for bruits at all sites – iliac, femoral and popliteal arteries on both sides	☐
5	**Manoeuvres**	

	- Buerger's test
	  o *Elevate legs about 15 degrees*
	  o *Elevate leg further- Buerger's angle is the angle at which leg becomes pale*
	  o *Then ask patient to hang leg over the side of the bed - Buergers test*
	  ▪ ? time to venous filling
	  ▪ ? reactive hyperaemia
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		☐
		☐

6	**End**	

	- To complete the examination:
	  o Full CVS and peripheral vascular examination
	  o Neurological examination
	  o Examine the abdomen for AAA
	  o Bedside Investigations
	  ▪ ABPI
	  ▪ Glucose
	  ▪ ECG
		
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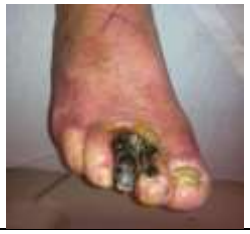
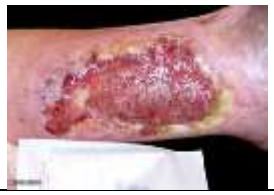
Examination findings: ulceration

Type	Usual Location	Pain	Characteristics	Associated Findings
Ischemic/ arterial	Distal, on dorsum of foot or toes, over bony prominences	Severe, particularly at night; relieved by dependency	Irregular edge; poor granulation tissue, dry necrotic base; round or punched-out with sharp demarcation	Trophic changes of chronic ischemia, pale, hair loss, atrophic skin, cool feet; absence of pulses, prolonged capillary refill (>4–5 s); ABI <0.5; dependent rubor, elevation 
Venous	Lower third of leg (gaiter area); between malleolus and lower calf, majority at medial malleolus	Mild; relieved by elevation	Shallow, irregular shape; granulating base; flat or steep elevation margins; fibrinous material at ulcer bed	Lipodermatofibrosis/lipodermatosclerosis, pigmentation, edema, atrophie blanche; telangiectasia; normal capillary refill time and normal 
Neurotrophic	Under calluses or pressure points (e.g., plantar aspect of first or fifth MTP joint)	None	Punched-out, with deep sinus, variable depth partial thickness to severe involving tendon, fascia, joint capsule, or bone	Demonstrable neuropathy, may be associated with underlying osteomyelitis 

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Arterial Vascular pathology – Student Handout

Case 1 – Intermittent claudication

Mr Harvey has presented to the GP complaining of pain in his legs, specifically his calves. It's worse on the left than the right. It comes on when he walks for more than 2 minutes or walks uphill. It goes away when he rests. He doesn't get it at night or when he moves around the house for short periods. PMH: He is a Type 2 Diabetic and smokes 20 cigarettes a day.

Case 2 – Acute Limb Ischemia

Mr Winters presents to the GP complaining of a severely painful left leg. It started an hour ago and is very severe. He is now struggling to move it and feels tingling. His doctor has recently started investigating an irregular heartbeat that he noticed last month.

	Case 1 - Intermittent Claudication "Angina of the limbs"	Case 2 - Acute Limb Ischemia
Key features		
Important features of history		
Examination findings		
Relevant investigations		

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Self-guided study

Read through the cases below. In what ways are they similar to the cases already discussed? In what ways are they different?

Case 4

Mr Barry presents with an intense pain in his chest which comes on when he runs for a bus or mows the lawn. He has to stop and rest, which will relieve the pain. He doesn't get it at rest. His GP has given him a spray to put under his tongue, which helps.

Case 3

Mr Barry's pain has now started when he has sitting watching TV. It is intense, crushing and radiates to his left arm. He is pale and sweaty and his wife calls an ambulance