

# Gen vascular

UL

Radial A - HR  
Radio-radio delay  
Radio-fem "

BP - l/y  
standu Both arms

Head

S/f temporal A ? delay

Neck

Carotids

IVP

Prominent pulsate ← ↑ tortuosity - vessels in neck  
Subclavian A - bruit carotid A aneu  
AB

Chest

S<sub>1</sub> - S<sub>2</sub>

Abdo

Aorta ? aneu  
Bruit

Iliac A

Renal A

? Kidney size

LL

Fem  
Pop  
DP  
PT

+ just felt    ++ faint    +++ well-felt

ABI ratio  
(if ✓ DP/PT pulses)

Gen Vasculer

(11)

... ..

... ..

... ..

... ..

(12)

... ..

(13)

... ..

... ..

... ..

(14)

... ..

(15)

... ..

... ..

... ..

... ..

(16)

(17)

... ..

... ..

... ..

MR Angiogram

Galium - shonken Ti

Stent - artefact  $\rightarrow$  magnetic susceptibility

# Vasc Exam LL

(I) ① Skin - Scars/Dressings  
loss hair

② Colour - Shiny, scaly  
white/Pallor  
Cyanosis

- Pressure areas - Thicken / Discolourat<sup>n</sup> / Blister / Ulcer

- Nails - Dystrophy - Thickened  
Crumbling  
? Rate growth

Heal  
Mottled  
Ball foot  
Heal 1" > 5"  
Up for > btw toes

② Musc - Atrophy

(ii) Ulcer - sharply demarcated, punched out  
base - xgranulat<sup>n</sup> tissue  
↓ bleed  
↑↑ painful

(iv) Necrosis - Dry gangrene (Apx. Frostbite) → brown/black  
crinkled, withered, hard mass  
(Sensless & not painful)  
✓ line demarcat<sup>n</sup>  
→ autoamputate  
Wet " - wet & boggy  
- pw at line demarcate

(P) ① Capillary refilling - ? poor  
(Press - 2sec)

② Temperature - Cold: site transition from warm to cold  
→ Anatomy - disease  
Knee warmer → occlus<sup>n</sup> - s/f fem A → dev collateral  
btw profunda fem & pop

**Pulses** - Aorta Common Iliac 4 3 2 1+  
Fem  
Pop  
DP  
PT  
ASIS & midline  
- 3 fingers  
(Capain Evase)  
Knee flexed 90°  
at rest - relaxed

" Couldn't feel a strong popliteal pulse "

Ant tibial  
Peroneal - in DM

A-wall - hardness / firmness

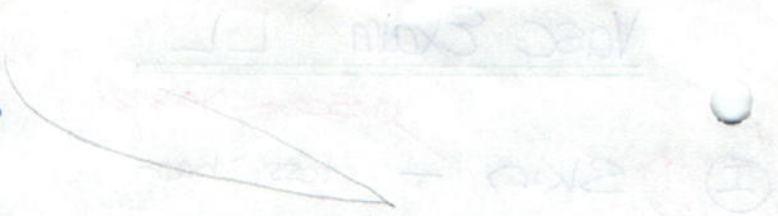
ⓐ Bruit

Special: ① **Buerger's test**  
- 30sec  
- bilateral (together)

on elevat<sup>n</sup> → pallor  
(Vasc angle → pressure in small vessels units)  
dependent → delay in return (max vasodil)  
rubor  
↓ flow → sluggish flow → ↓ del<sup>n</sup> Hb  
and<sub>2</sub> metabolism → precapillary  
A-V fistula  
open up

LN - ? enlarged

(A) **Bruits** — over fem A  
adductus  
pop A



Special

(2) **Response to exercise** — audible bruit } stenosis — significant  
↓ pulse strength }

(3) **Ankle Brachial Index (ABI)** —  $< 1.0$   
(VUS)  
( $> 1.2$  — stiff vessel wall: DM)

(4) **Reactive Hyperaemia** — 1-2 sec  
250 mmHg ~ 5 min  
(flap btw release cuff + red flush on skin)

**Extra**

NS — Sensat<sup>2</sup>  
Power  
Reflexes

a V

# Arterial ulcer

Tips & toes

Pressure areas - bony prominences

Very tender → ischaemic rest pain  
 ++ on elevat  
 - hangs down  
 ++ ↓ reman dressing  
 Cold

Any size

Edge: Punched-out (No attempt to heal)

Skin - blue-grey

Black/grey eschar (if large)

Sloughing ± discharge - serum/pus

Very deep

No granulat<sup>e</sup> tissue  
 - pale-pink

± Bare bone / lig / tendons

discharge - thin serous exudate ± purulent

LN - normally enlarged  
 (infected - localized)

Surround skin - pale / cold / atrophic  
 (ischaemia)

① Pulses → absent  
 + other vas D

② NS - weakness  
 reflexia  
 loss sensat<sup>n</sup>

③ Urine - glu

## ⊕⊗ Neuropathic ulcer

Deep & peritend

Over pressure areas

BUT - PAINLESS

Surround tissue - healthy (⊙ blood supply)  
 (⊖ loss sensat<sup>n</sup>)

# Venous ulcer

Lower limb - lower third  
 (medial side)  
 (Never above lower thigh)

Painful initially → chr: painless  
 ↓ relieved ↓ elevat<sup>n</sup>  
 discomfort, DIC  
 unsightly

Any size

Sloping, irreg outline  
 Pale-purple

Pink granulat<sup>e</sup> tissue  
 & White fibrous tissue

Shallow & flat

DIC - seropurulent  
 ± blood  
 Crusty heavy infect (pus)

Not enlarged / tender!

Lipodermatosclerosis - indurated  
 scars  
 Dil veins → Varicose veins  
 pigmentat<sup>n</sup>

Ankle jt - limited movement

rise - may be observed  
 squin deformity  
 oedema + stasis

① Abdo - malignancy  
 other leg  
 BUT feet  
 warm & pink

⊕⊗ Sq ⊙ CA cur  
 in chr ulcer  
 - long Hx  
 edge: raised / thickened  
 (ngw: enlarged!)  
 (Majocchi's ulcer)

# Arterial

# Venous

Arterial ulcers are characterized by pain, especially at night, and are often associated with peripheral vascular disease. They typically occur on the lateral malleolus of the ankle.

Venous ulcers are characterized by pain that is relieved by elevation of the limb and are often associated with chronic venous insufficiency. They typically occur on the medial malleolus of the ankle.

Arterial ulcers are often associated with atherosclerosis and may be accompanied by claudication and rest pain.

Venous ulcers are often associated with varicose veins and may be accompanied by edema and skin discoloration.

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④

SSG - oftenix - recur

## ADx Leg Ulcers

① VASC - Arterial  
          - Venous

② Traumatic ; decubitus

③ Neuropathic

④ malignancy - SCC

⑤ Infective

⑥ Others - Drugs: Warfarin / bi loypt  
          NID, L.P.

# Causes of leg Ulcer

## Vascular - Venous

Skin around it - pigmented  
Med side leg, ankle (med. malleolus)  
well-defined  
sharply edge

## - Arterial (AS)

poor pulses  
bruit - fem A, abd aorta, pop aery  
lat side leg, shin: Sharply def (punched out)  
pressure points  
pain

## - Vasculitis

Buergers D  
Giant cell  
PAN  
SUE  
Allergic

effluvia? → post  
(Mantovani ulcer)

## - Abn blood

## - Lymphatic

Imun complex D  
Sickle cell anaemia  
Cryoglobulinemia  
Congenital  
Post-infectious  
- biological

## Neural

## - Peri neuropathy

DM  
AIC  
Leprosy  
Syphilis

## Trauma

## - Injury → small

### Iatrogenic

Tight plaster

Pain under plaster → \* should lift

### If deformity

RA

also poor heal (cortisone)

given pethidine  
without find out  
cause

## Decubitus

(Pressure sore)



\* Iceberg

## Infect<sup>2</sup>

Bairnsdale ulcer (myco. ulcerans)

Tropical

Staph septicaemia → septic emboli: black dots = ulcer

Insect bites

## Tumour

BCC

SCC - Majocchi's ulcer: SCC ans. fr chr ulcer

Malign. melanoma

Kaposi's sarcoma

Lymphoma

## Underlying sys D

DM

= arterial ulcer

NLD, perforated GA

Porphyria cutanea tarda

Gout

## Drugs

B<sup>-</sup>, I<sup>-</sup>

Ergotism

Warfarin/Heparin necrosis

## Others

Sweet's sym

Lichen planus

Bullous D