# Core Modality 2- Arterial Duplex Scan Reports

1.

**Rt lower limb arterial duplex**

The CFA is patent with minimal diffuse disease with triphasic waveforms (PSV- 69cm/s).

The profunda femoral artery is patent with minimal disease with triphasic flow.

The proximal superficial femoral artery is patent. There is a short occlusion (~8cm) of the SFA in the mid thigh. The SFA reforms in the distal thigh with damped monophasic flow.

The popliteal artery is patent with minimal disease with damped monophasic flow (PSV-22cm/s)

Laura Haworth

Anna Jerram

2.

**RIGHT LOWER LIMB ARTERIAL DUPLEX.**

The CFA is patent with minimal disease and triphasic waveforms.

The profunda femoral artery is patent with minimal disease and triphasic waveforms.

The proximal and mid SFA is patent with minimal disease and triphasic waveforms. There is heavy calcification in the mid/distal SFA but appears to be patent.

The popliteal artery is patent with min/moderate calcified disease with triphasic waveforms that become more damped distally.

Laura Haworth

3.

**LEFT ARTERIAL ASSESSMENT**

CFA is patent with minimal diffuse disease.

The very proximal popliteal artery appears occluded. The proximal popliteal artery is patent with heavy calcification. The mid and distal popliteal artery is patent with minimal diffuse disease.

The ATA at the ankle level above the malleolus is patent with 40-50% lumen loss; minimal calcification identified. The patent lumen is approximately 1.6mm. Unable to visualise the DPA due to ulceration.

Laura Haworth

Anna Jerram (ATA and DPA check)

4.

**RIGHT LOWER LIMB ARTERIAL ASSESSMENT**

Poor image quality of iliac arteries but they appear patent where seen with no obvious evidence of any significant stenosis.

There is moderate/severe calcification in the CFA with good velocity monophasic flow.

Poor quality image of the profunda femoral origin due to calcification but appears patent.

Heavy calcification at the origin of the SFA. The remainder of SFA is patent throughout with min/moderate disease with good velocity monophasic flow.

The proximal popliteal artery is patent. The mid/distal popliteal artery occludes- which appears be more acute.

Unable to clearly visualise the run off vessels.

Distally the PTA and ATA are patent with damped monophasic flow (PSV-32cm/s and 16cm/s respectively.)

L.Haworth

5.

**RIGHT LOWER LIMB ARTERIAL ASSESSMENT**

The CFA is patent with minimal disease (<40%) with triphasic flow PSV- 213cm/s. The profunda femoral artery is patent with minimal disease (<40%) with triphasic flow PSV- 192cm/s

SFA

- The proximal SFA is patent with minimal disease (<40%) and triphasic flow PSV- 160cm/s.

- The mid SFA is calcified, with areas of diffuse disease present (difficult to accurately quantify). Damped triphasic flow detected (PSV:~79cm.s) with large collateral branch noted.

- Poor image quality of the in distal SFA due to calcification, collateral branches noted with no obvious flow detected in a segment ~8cm in length ? occlusion. The SFA reforms distal to this region with monophasic flow -PSV-50cm/s detected.

The popliteal artery is patent with minimal disease with monophasic flow PSV-58cm/s. 2 vessel run off identified.

L.Haworth

6.

**Left LOWER LIMB ARTERIAL ASSESSMENT**

The CFA is patent with minimal disease (<40%) with triphasic flow PSV 157cm/s. The profunda femoral artery is patent with minimal disease (<40%) with triphasic flow PSV 126cm/s.

SFA:

- The Proximal SFA is patent with small area of minimal diffuse disease and triphasic flow (PSV:~110cm.s).

- Areas of calcification prox-mid SFA, however there is an area of SEVERE diffuse disease present measuring ~1.8cm in length with significantly raised velocities detected (PSVR:4.9) suggesting >75% lumen loss.

- The Mid and Distal SFA are patent, however areas of acoustic shadowing overlying the vessel. Areas of diffuse disease present with some turbulent flow in visualised segments (PSV:~236cm.s), however difficult to accurately quantify disease.

The Popliteal A is patent with areas of min/mod diffuse disease and monophasic flow present (PSV:~64cm.s). 3 vessel run off identified.

L.Haworth

T. Cooper

7.

**LEFT LOWER LIMB ARTERIAL DUPLEX**

The CFA is patent with minimal disease with triphasic flow (PSV- 78cm/s).

The profunda femoral artery is patent with minimal disease with triphasic flow (PSV- 133cm/s)

The SFA is patent throughout with minimal disease with triphasic flow (PSV 107-73cm/s)

The proximal popliteal artery appears patent with minimal disease. There is moderate disease in the mid popliteal artery. The distal popliteal artery is occluded.

The origin of the ATA as not clearly identified. The proximal ATA appears to refill by collaterals.

PTA appears occluded throughout its visualised length. Peroneal artery not clearly identified ?occluded.

Laura Haworth

Anna Jerram

9.

**RIGHT LOWER LIMB ARTERIAL ASSESSMENT**

The distal EIA appears patent with hyperaemic triphasic flow.

Reduced quality imaging in the groin due to calcification but there appears to be a chronic occlusion of the very distal EIA/CFA to the bifurcation (approx 4.5cm). Collaterals noted.

The profunda femoral artery appears patent with monophasic flow (PSV-120cm/s).

The superficial femoral artery is patent throughout with mild diffuse disease with damped monophasic flow (PSV- 56-41cm/s)

The popliteal artery is patent with mild diffuse disease with damped monophasic flow (PSV- 40cm/s).

L.Haworth

10.

**RIGHT LOWER LIMB ARTERIAL DUPLEX**

The CFA is patent with mild/moderate diffuse disease with triphasic flow.

The PFA is patent with mild/moderate diffuse disease with triphasic flow.

The proximal and mid SFA is with patent with mild/moderate diffuse disease with damped triphasic flow PSV-26cm/s. The SFA occludes (approx 26cm from the groin crease). There is a small area of flow seen in the very distal SFA.

Reduced quality views in the popliteal fossa but the popliteal artery appears occluded throughout.

L.Haworth

11.

**LEFT LOWER LIMB ARTERIAL DUPLEX**

The CFA is patent with mild/moderate diffuse disease with triphasic flow PSV-86cm/s.

The PFA is patent with mild/moderate diffuse disease with triphasic flow PSV-75cm/s.

The SFA is patent with moderate diffuse disease which becomes heavier more distally with damped triphasic flow.

The popliteal artery is patent with mild/moderate diffuse disease with damped triphasic flow PSV- 22cm/s.

The PTA is patent with monophasic flow (PSV-27cm/s)

The ATA is patent with monophasic flow (PSV- 40cm/s)

L.Haworth

12.

**RIGHT LOWER LIMB ARTERIAL DUPLEX**

The CFA is patent with minimal disease and triphasic flow.

The profunda femoral origin is patent with minimal disease and triphasic flow.

The origin of the SFA is patent with minimal disease and triphasic flow. The proximal SFA appears to occlude for approx 13cm and reforms fully distally. A collateral is noted. The distal SFA is widely patent with minimal disease and monophasic flow.

The popliteal artery is patent with minimal disease and damped monophasic flow.

Laura Haworth

13.

**Colour Duplex of Left Lower Limb Arteries**

The patient verbally consented to the scan.

A chaperone was present - E.Blair.

The CFA is patent with minimal disease and triphasic flow, PSV 129cm/s.

The PFA is patent with minimal disease and triphasic flow, PSV 108cm/s.

The proximal to mid is patent with minimal disease and triphasic flow and becomes damped triphasic flow distally, PSV 113-57cm/s.

The popA is occluded proximally for ~6cm and reforms in the distal popA via a collateral.

L.Haworth

14.

**Colour Duplex of Right Lower Limb Arteries**

The patient verbally consented to the scan.

The CFA is patent with minimal disease and triphasic flow.

The PFA is patent with minimal disease and triphasic flow.

The proximal to mid is patent with minimal disease and triphasic flow. Heavy diffuse disease seen in the mid-distal SFA with monophasic flow. Obscured views due to heavy calcification but no obvious evidence of any occlusion or focal stenosis.

The popA is patent with minimal disease and monophasic flow.

L.Haworth

15.

**RIGHT LOWER LIMB ARTERIAL DUPLEX**

The CFA is patent with mild/moderate diffuse calcified disease with hyperaemic triphasic waveforms.

Impaired views of the profunda femoral origin due to calcification but appears patent with min/moderate disease.

The proximal SFA is patent. Impaired views of the prox/mid SFA due to heavy calcification ?patency. The mid-distal SFA appears patent with heavy diffuse calcification with damped monophasic flow.

Impaired views of the popliteal artery, but it appears patent with heavy calcification with damped monophasic flow.

Unable to detect flow in the PTA and ATA distally- ?patency ?heavy calcification.

Recommned alternative imaging if deemed clinically appropriate.

Laura Haworth

16.

**Colour Duplex of Duplex of Left Lower Limb Arteries**

The patient verbally consented to the scan.

The CFA is patent with minimal disease and triphasic flow, PSV 81cm/s.

The PFA is patent with minimal disease, triphasic flow and is of large calibre, PSV 59cm/s.

The SFA is occluded from its origin throughout its length.

Blood flow reforms in the proximal popliteal artery via large collateral.

The popA is patent with minimal disease with monophasic flow, PSV 14cm/s proximally and 23cm/s distally.

L.Haworth

17.

**LEFT LOWER LIMB ARTERIAL ASSESSMENT**

Very reduced quality imaging of the iliac arteries due to bowel gas and calcification- raised velocities detected but unable to clearly visualise a stenosis- recommend alternative imaging.

The CFA is patent with moderate diffuse calcified disease present with monophasic waveforms.

The profunda femoral artery origin is patent with moderate/severe diffuse calcified disease present with monophasic waveforms.

The SFA appears patent throughout with moderate/heavy diffuse disease present with damped monophasic waveforms.

The popliteal artery is patent with moderate/heavy diffuse calcified disease with damped monophasic flow.

Suggest alternative imaging to visualise the iliac arteries.

Suggest vascular opinion.

Laura Haworth

18.

**RIGHT LOWER LIMB ARTERIAL DUPLEX SCAN:**

Unable to visualise the CIA due to depth of vessel.

The EIA appears patent with slightly turbulent triphasic waveforms PSV 239-283cm/s. The stent appears to be in the distal EIA/proximal CFA.

CFA - appears patent with triphasic waveforms PSV 174cm/s.

PFA origin - appears patent and well developed with triphasic waveforms PSV 108cm/s.

SFA - not identified - likely chronically occluded and has reduced in size.

PopA - no flow seen proximally. Flow appears to reform in the distal vessel via a collateral. Distal popliteal is then patent with reduced monophasic waveforms PSV 33cm/s.

ATA and PTA - -appear patent with reduced monophasic waveforms.

L.Haworth

19.

INCIDENTAL FINDING

**RIGHT LOWER LIMB ARTERIAL ASSESSMENT**

The CFA is patent with triphasic flow.

The profunda femoral origin is patent with triphasic flow.

The SFA appears to be occluded from the origin throughout its' length.

The popliteal artery is patent with monophasic flow.

Laura Haworth

20.

**RIGHT LOWER LIMB ARTERIAL DUPLEX**

The aorta is patent and of normal calibre (1.9cm AP).

Reduced quality views of the iliac arteries due to bowel gas but the CIA, IIA and EIA appear patent with triphasic flow.

The CFA, profunda femoral origin, SFA and popliteal arteries are all patent with minimal disease and triphasic flow.

The ATA, PTA and peroneal arteries are all patent throughout their length with diffuse calcified disease but no evidence of any focal stenosis.

L.Haworth

M.Yeung

21.

**RIGHT LOWER LIMB VENOUS ASSESSMENT**

The aorta is patent and of normal calibre (2.2cm AP)

Reduced quality views of iliac arteries due to bowel gas but they appear patent with triphasic flow.

The CFA is patent with heavy diffuse calcified disease present with triphasic flow.

The profunda femoral artery is patent with diffuse disease present with triphasic flow.

The SFA and stent is occluded throughout.

The very proximal popliteal artery is occluded. The mid/distal popliteal artery is patent with very damped monophasic flow (PSV-8cm/s)

No flow detected in the ATA ?occluded ?heavy calcification.

The posterior tibial and peroneal arteries are patent with diffuse calcified disease with very damped monophasic flow (PSV~5cm/s)

L.Haworth

M.Yeung

22.

**RIGHT LOWER LIMB ARTERIAL DUPLEX**

Reduced quality examination due to body habitus.

The CFA is patent with minimal disease with triphasic flow.

The profunda femoral origin is patent with minimal disease with triphasic flow.

The Proximal SFA is patent with minimal disease. There is an approx 10cm occlusion of the proximal-mid SFA. The SFA reforms in the mid thigh with minimal/moderate diffuse disease present with monophasic flow.

The popliteal artery is patent with minimal disease with monophasic flow (PSV-27cm/s)

Low velocity flow detected in the pedal arteries (PSV~18cm/s)

L.Haworth

23.

**LEFT LOWER LIMB ARTERIAL DUPLEX**

The CFA is patent with minimal disease and triphasic flow.

The profunda femoral artery is patent with minimal disease and triphasic flow.

The SFA occludes just beyond the origin and appears to be ACUTLEY thrombosed in appearance rather than atherosclerotic. Recanalised flow is seen 15cm distal to the CFA bifurcation. There appears to be significant non-occlusive thrombus throughout the mid-distal SFA (approx 60% lumen loss)

The popliteal artery is patent with moderate disease (approx 50% lumen loss) with damped monophasic flow.

The posterior tibial and peroneal arteries are patent with minimal diffuse disease and damped monophasic flow.

The proximal and mid anterior tibial artery is patent with damped monophasic flow. Difficult to detect flow in the mid-distal ATA ?occluded ?heavy calcification. The very distal ATA appears to be patent and refilling via a collateral at the level of the medial malleolus (suggesting that the proximal segment is occluded).

Results discussed with vascular reg (K.Khan)

L.Haworth

A.Jerram

24.

**RIGHT LOWER LIMB ARTERIAL DUPLEX**

The CFA is patent with moderate disease (approx 50% lumen loss) and triphasic flow.

The profunda femoral origin is patent with minimal disease with triphasic flow.

The proximal SFA is patent with minimal disease. The SFA occludes in the mid thigh. Reduced quality views of the distal SFA but there appears to be filling ?retrograde of the distal SFA via a collateral.

There appears to be some disease mid pop A, however there is extensive calcification in this area therefore unable to grade accurately ?occluded

L.Haworth

25.

**LEFT LOWER LIMB ARTERIAL DUPLEX**

The CFA is patent with minimal/moderate disease with triphasic flow.

The profunda femoral origin is patent with minimal disease with triphasic flow.

The proximal SFA is patent with minimal disease. The SFA occludes in the prox/mid thigh. The distal SFA appears to reform via a collateral.

Very reduced quality views of the popliteal artery due to heavy extensive calcification, therefore unable to comment on the severity of disease in this area ?occluded.

Suggest alternative imaging if appropriate.

L.Haworth