**Countess of Chester Hospital** 

NHS Foundation Trust

The Countess of Chester Health Park

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Study Description: **US Doppler upper limb arteries Lt** Study Date: **26/04/2023**

**Addendum created at 26/04/2023 15:13:38:**

**\* Irregular heart rate noted**

**Addendum by:**

**Clinical Vascular Scientist Nia Steeves**

**Indication:**

bp l arm 120 systolic, r arm 175. patient breathless inx for aortic murmur with GP, ?SCA stenosis as per AB

**Report:**

**LEFT UPPER LIMB ARTERIAL DUPLEX**

Common carotid artery: Patent, good antegrade waveforms, PSV 82cm/s, EDV 13cm/s.

Vertebral artery: Where seen appears patent with reduced monophasic retrograde flow, PSV 96cm/s. This finding suggests subclavian steel syndrome.

Subclavian artery: Appears patent along length. Turbulent slightly reduced monophasic waveforms noted proximally with PSV ranging between 64-95cms/s. Reduced monophasic waveforms, noted in the mid-distal subclavian artery, PSV 59-50cm/s.

Axillary artery: Patent with slightly reduced monophasic waveforms, PSV 59cm/s.

Brachial artery: Patent with slightly reduced monophasic waveforms, PSV 61-42cm/s.

Radial artery: Patent with slightly reduced monophasic waveforms, PSV 34cm/s.

Ulnar artery: Patent with slightly reduced monophasic waveforms, PSV 41cm/s.

**Additional comments:**

Right Common carotid artery: Patent, good antegrade waveforms, PSV 90cm/s, EDV 16cm/s.

Right Vertebral artery: Where seen appears patent with open orthograde flow, PSV 66cm/s.

Right Subclavian artery: Patent proximally with turbulent biphasic waveforms, PSV 86cm/s.

**CONCLUSION**

**Evidence of retrograde flow in the left vertebral artery, this finding suggests subclavian steel syndrome.**

**Where seen a subclavian stenosis was not identified, however waveforms are slightly reduced and monophasic in the subclavian artery and in the left arm, this would suggest significant disease or arterial compression proximal to the proximal subclavian artery ? at Subclavian origin / aortic arch. Suggest alternative imaging to investigate further.**

**Priority:++ Significant or Unexpected Finding ++**

**Reported by:**

Nia Steeves

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Countess Of Chester Nhs Trust

Final Date & Time: 26/04/2023 14:58:56