**Countess of Chester Hospital** 

NHS Foundation Trust

The Countess of Chester Health Park

Liverpool Road

Chester

CH2 1UL

Study Description: **US Doppler upper limb arteries Lt** Study Date: **12/04/2023**

**Indication:**

Left upper limb spasm 5/7. Palpable proximal brachial artery, non palpable distal brachial and radial arteries. Monophasic Doppler signals at the wrist.

**Report:**

**LEFT UPPER LIMB ARTERIAL DUPLEX**

Common carotid artery: Patent, good antegrade waveforms, PSV 89cm/s.

Subclavian artery: Patent along its length with good triphasic waveforms, PSV 87-63cm/s.

Axillary artery: Patent, good triphasic waveforms, PSV 43cm/s.

Brachial artery: The proximal to mid brachial artery is patent, with good monophasic waveforms, PSV 40-28cm/s. At approx. 31cm proximal to the wrist, no colour flow or PWV signal detected in the distal brachial artery, the vessel appears occluded. On grey scale imaging the lumen demonstrates low echogenic echoes and there appears to be some movement ? flow stasis (images saved to carestream PACS for review) ? Spasm in the forearm is compressing vessel and obstructing flow. At 31cm there is evidence of a collateral vessel.

Radial artery: Unable to visualise the origin ? Compressed. Flow appears to reform in the proximal forearm at approx. 21cm proximal to the wrist, via a collateral vessel, with reduced monophasic waveforms, PSV 12cm/s. Distal to the radial artery is patent to the wrist with reduced monophasic waveforms, PSV 14cm/s

Ulnar artery: Unable to visualise the origin ? Compressed. . Flow appears to reform in the proximal forearm at approx. 20cm proximal to the wrist, via a collateral vessel, with reduced monophasic waveforms, PSV 18cm/s. Distal to this the ulnar artery is patent to the wrist with reduced monophasic waveforms, PSV 9cm/s

**Conclusion**

**The distal branchial artery appears occlude, no colour flow or PWV detected. ? Spasm is obstructing flow into the forearm**.

**Priority:** **++ Urgent Finding ++**

**Reported by:**

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Final Date & Time: 12/04/2023 16:49:03