



emily blake has completed this personal reflection on **30/03/2020**

Paper: Winter CPD Questions 2020

Personal Reflection:

Educational learning:

Two papers:

'The use of tilt-table in the investigation of venous disease'. Paper explores the effect of using a tilt-table and the advances in being able to quantify venous obstruction along with the direct impact on research and clinical practice. 'The comparison between duplex ultrasound and multi-gate quality doppler profile software in the assessment of lower limb perforating vein direction'. This studied data on the real haemodynamic features of perforating veins and on their pathophysiological role.

Both papers were very interesting reads particularly as both explore analysis of data using both qualitative and quantitative information to expand on the known basics of diagnosing venous insufficiency.

The first paper concludes importantly that rapid venous filling may point to the cause if reflux was missed on ultrasound after classical provocation manoeuvres - tilting may unmask occult reflux but additional research would be required to understand if tilting provides any advantages in the diagnosis of reflux. The study reintroduces the tilt-table as a potential way of improving the current investigations by using gravity as the provocation manoeuvre. But more so it proposes a method to measure global venous drainage. With the use of accurate and quantitative data this may improve management.

The second paper discusses QDP technology and how it offers the possibility of assessing net-flow direction in an entire vessel, independent of its potential tortuosity. In this study the net flow direction was assessed in calf and thigh. It discusses that there is a lack of overlap between the a traditional PV incompetence definition and a net outward flow. We know the PVs drain from the superficial toward the deep system but the PVs could also serve as 'pressure overload dissipaters' draining blood from the compartment at higher pressure toward one with lower pressure (this makes sense with scan findings in everyday clinical practice as a lot of the time we see reflux exiting out through perforators).

Considering the above papers this will lead to further discussions within my team; looking at how we conduct venous scans at present after seeing the results/improvements concluded from the above two papers.