



Michelle Cooper has completed this personal reflection on **19/01/2023**

Paper: Autumn 2022 CPD Questions

Personal Reflection:

Description of the learning: questions based on two research papers, 1. Bicycles exercise ankle brachial index recovery time as a novel metric for evaluating the hemodynamic significant of external iliac endofibrosis in competitive cyclists (Journal of Vascular Surgery Cases, Innovations and Techniques , Tran et al, 2021). 2. The reliability of duplex ultrasound in diagnosing popliteal artery entrapment syndrome: an observational pilot study (Journal of radiation research and applied sciences, Alsaadi et at, 2022).

Evaluation and analysis.

Paper 1. The paper presented a novel exercise haemodynamic metric - BART (bicycle exercise recovery time). This was used in addition to exercise ABPI to further characterise the pre- and post-treatment haemodynamics in the lower limbs in patients treated for external iliac artery endofibrosis (EIAE). The metric was defined as the time required in minutes for the ABPI to return to 0.9 after a period of exercise. The research found that surgical correction of EIAE resulted in an improvement in BART postoperatively, with improved values correlating with better patient satisfaction. The measure provided further haemodynamic information, in addition to that provided by an exercise ABPI.

Paper 2. Duplex can give a false-positive results in the assessment for popliteal artery entrapment (PAES), and therefore should not be used in isolation in determining the asymptomatic from symptomatic patients with PAES.