Vascular Assessment Unit Quality and Audit report 2015 and 2016

Introduction

As part of our preparation for IQIPS (Improving Quality in Physiological Services) various quality assessment tools have been developed within the department over the last 2 years looking at the imaging aspects of the service we provide. A quality assurance team was formed to instigate this process using predominantly guidelines provided by the British Medical Ultrasound Society (BMUS), The Royal College of Radiologists and The Society and College of Radiographers (SoCR). A programme was put in place to assess the ultrasound machines we use to ensure that consistent, reliable results are provided and to monitor the systems for any deterioration. Also various audits of the operator dependant aspects of the service were implemented to ensure that consistent high quality imaging and reporting standards are provided. The whole process of instigating these programmes has involved many modifications and discussion points in our effort to provide the optimum service and the following report reflects our progress so far.

Quality Assurance of the Ultrasound Systems

Using the BMUS guidelines, initially 3 levels of testing were applied to the ultrasound machines.

Level 1 Infection control and scanner damage (assessed daily)

Level 2 Basic scanner and transducer testing (assessed weekly)

Level 3 Further scanner and Transducer testing (assessed monthly)

We attempted to maintain this level of testing for approximately 8 months but found that it was unachievable due to high workloads and time restraints. It was decided that we would continue with our level 1 daily testing but merge the level 2 and 3 tests together and so far this system has been successful.

As a result of our regular tests general awareness of the condition of the machines has been enhanced and we have been able to address maintenance issues before they become critical.

3 probes and broken buttons on one of the machines have been replaced since the QA programme has commenced and the service contract for the probes has been extended.

Audit of Images, diagnostic documentation, reporting and peer consistency (assessed annually)

Image quality was assessed by randomly selecting 5 arterial, 5 venous and 5 carotid scans then reviewing the images stored and assigning scores for the use of B mode, Pulse wave Doppler, colour flow and annotation. The scoring system was adapted from the SVT practical examination.