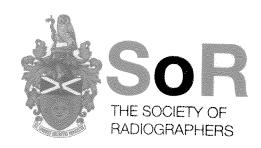
Chief Executive Officer Richard Evans OBE



30th January 2018

Your ref: PJB/NELSON, VL

Peter J Bedford
Senior Coroner for Berkshire
Reading Town Hall
Blagrave Street
Reading
Berkshire
RG1 10H

Dear Mr Bedford

Re: Regulation 28 Report following the death of Violet Levine Nelson

Thank you for your letter dated 7th December 2017, which we at the Society and College of Radiographers (SCoR) have now had the opportunity to consider. We should like to offer the following response:

To comment first on your matters of concern (section 5 of the report), with reference to matter number 1, there is an implication that sonographer-led examinations are of a lower standard than those of a consultant radiologist. The performing and reporting of ultrasound examinations, including of the vascular system, by non-medically qualified sonographers is extremely well established practice in the UK. There is extensive audit and research evidence to show that image interpretation and reporting capabilities are equivalent to radiologists and this has led to widespread local practices where suitably skilled sonographers work autonomously in scanning and reporting cases such as that in your investigation.

The SCoR has always been clear in its demands that, in each of the fields in which they report, reporting radiographers must operate at the same standard as their clinical radiologist colleagues, and must demonstrate this at the point at which they complete their training and begin to practice.¹

The nature of ultrasound scanning is that, as a dynamic examination, the interpretation of images is best undertaken by the operator in real time as the examination proceeds. Supervision or second opinions provided by another clinician usually involve static images.

This is not to suggest that a second opinion from another skilled professional might not have been helpful in identifying the possibility that the findings in this case were suggestive of thoracic extension of the aortic aneurysm. There is good evidence to suggest that second opinions or double reporting of examinations can increase reporting accuracy.

Cont/		_		_					

To comment now on the more general points of concern; In this case it would appear that the sonographers involved in the case have reported the abdominal aortic aneurysm (AAA) as both infra-renal and supra-renal at different examinations.

It can be quite difficult, with ultrasound, to determine the origin of the renal arteries, particularly in patients with increased body habitus or overlying bowel gas. Image quality is also dependent on the equipment available. Colour Doppler scanning (where available) can be of value in determining the origin of the renal arteries in relation to AAA in difficult cases.

The SCoR and the British Medical Ultrasound Society (BMUS) Guidelines for Professional Ultrasound Practice ² (2017) refer to the Society of Vascular Technologists (SVT) guidelines for vascular examinations. It might be helpful to include within the SCoR and BMUS guidelines some information about abdominal aortic aneurysms and a suggested policy for referral for thoracic CT and review by a radiologist or a vascular surgeon, when a supra-renal aneurysm is detected or suspected,. This would provide clarity and guidance, which could then be incorporated into local protocols.

The NHS AAA Screening Programme ³ provides the following protocol:

"If the proximal abdominal aorta appears aneurysmal as an extension of a more proximal thoracic aortic aneurysm the visible aorta should be measured accurately at its widest point as per usual protocol. The incidental findings policy should then be followed for further investigation of any suspected thoracic aortic aneurysm. The [patient] should remain within the screening programme with appropriate surveillance until informed otherwise via the clinical director." (page 12).

This AAA screening programme guidance indicates that further investigation should be included as part of the screening protocol. Consequently, we feel it would be appropriate for the same arrangements to be in place for detection during other ultrasound examinations in secondary care.

The current best practice guidelines produced jointly by SCoR and BMUS in 2017 recommend appropriate guidance on further investigations, where required, to be included within the ultrasound report. Specifically:

"Local policy should exist clearly stating mechanisms for advising on relevant further investigations that takes account of the professional background of the report author, which may be a non-medical one." (page 38)

and

"Recommendations for further investigations / management to include any appropriate recommendations for further investigation (eg CT/MRI/drainage/biopsy etc) dependent upon local department guidelines and practice." (page 40).

Cont/

It is known that this practice of sonographers recommending additional investigations varies across the UK, dependent on local protocols and schemes of work. In some departments, policy allows Sonographers only to provide a descriptive report and there would not be authority to recommend additional imaging. In these cases, a radiologist opinion should be sought for advising on further imaging or referral.

Suggested actions:

- We suggest that the Royal College of Radiologists (RCR) is asked to provide an opinion on this case. The RCR standards for reporting should (along with SCoR / BMUS) be referenced in local protocols for reporting on AAAs by both radiologists and sonographers ⁴.
- 2. We will review the SCoR and BMUS guidelines (2017), specifically to include guidance on referral of suspected supra-renal abdominal aortic aneurysms for thoracic CT, review by a radiologist or a vascular surgeon.
- 3. As we review the SCoR and BMUS guidelines (2017) we will include advice on:
 - the use of colour Doppler to determine the origin of the aneurysm in relation to the renal arteries, in difficult cases or recommend alternative imaging modalities, if necessary.
 - ii) using the superior mesenteric artery |(SMA) as a landmark to help determine supra or infra-renal location of an aneurysm, as the renal artery is approximately 1cm inferior to this
- 4. We will undertake an exercise to communicate to radiology services the need for sonographers to have clear processes for arranging onward referral or for ensuring this is handled by a suitable colleague in authority.

I trust that this fulfils the requirements for response from the Society of Radiographers. Naturally we shall be happy to provide any further detail if this might be of assistance.

Yours sincerely

RICHARD EVANS
Chief Executive Officer

Cont/.....

References:

 SCoR (2010) Medical Image Interpretation By Radiographers Definitive Guidance Page 8; Safety of radiographer reporting https://www.sor.org/system/files/document-library/public/sor_Definitive_Guidance_May_2010.pdf

2. Society and College of Radiographers and British Medical Ultrasound Society (2017) Guidelines for professional ultrasound practice. Available at:

https://www.sor.org/sites/default/files/document-versions/2018.1.5 scor bmus guidelines final.pdf

3. Public Health England (2016) NHS Abdominal Aorta Screening Programme: Clinical guidance and scope of practice for professionals involved in the provision of the ultrasound scan within AAA screening. Available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/552720/NAAASP_scope_of_practice_document_V2.0_130916.pdf

4. Royal College of Radiologists (2006) https://www.rcr.ac.uk/sites/default/files/bfcr061 standardsforreporting.pdf