

## **RCR Interventional Radiology Committee**

### **Stakeholder comments on NICE 'AAA: *diagnosis and management*' draft guidelines**

The Interventional Radiology (IR) Committee at The Royal College of Radiologists' response to the draft AAA guidelines is specifically related to issues regarding the effects of these guidelines on training and maintaining clinical competency in interventional radiology. We know that many of the other issues relating to the evidence base around the availability of EVAR as a treatment option for patients with AAA will be addressed by other stakeholders. Hence the RCR IR Committee's main commentary in this area is in relation to training and maintenance of competencies.

The draft guidelines are very explicit in outlining that EVAR should not be offered routinely to elective patients with AAA who are fit for open repair, but that it should be available and offered to patients in the context of a ruptured AAA.

From an RCR perspective, this raises a number of issues:

1. Training in any interventional procedure requires a sequential and experiential pathway to gain the generic and specific competencies required to perform that procedure. This will commence with early experience gained in undertaking relatively simple and straightforward cases, moving on to progressively more challenging cases as experience is acquired, to advance and hone an individual's skills. This ensures trainees are able to build up their skills in a procedure whilst remaining within their sphere of competence. Such an approach is vital in maintaining patient safety and ensuring individuals are not practicing beyond their capabilities during training.
2. Once an individual has gained the competence to perform an interventional procedure, there is a need to maintain that competency, and this relies to some extent on having the sufficient caseload to retain their skills.
3. For anyone training to gain competencies in EVAR, there is a need to select patients carefully, taking into consideration the individual's competency and experience. For trainees, this would generally mean selecting cases with simple aortic anatomy related to their AAA. The vast majority of such anatomy is found in patients undergoing elective EVAR. To date, elective EVAR has provided the training ground to safely train the next generation of consultants in this procedure.
4. In the emergency setting of EVAR for ruptured aneurysm, the AAA anatomy is generally more challenging than in the elective setting. It would therefore be difficult for trainees to gain hands-on experience of EVAR solely utilising the case mix seen in the emergency setting. Indeed, due to this increased complexity, most trainees would not perform EVAR in the ruptured aneurysm patient until they reached the final months of their training, close to the time of completion of training.

5. There are fewer ruptured AAA cases seen clinically when compared to elective AAA. Even if all patients with ruptured AAA underwent EVAR, the volume of cases would be insufficient to enable all trainees to gain the skills to perform EVAR. There would also be an impact on the ability of existing consultants to perform sufficient numbers of cases to enable them all to continue to maintain competence in this procedure. This would mean that EVAR would no longer be available 24/7 for patients with ruptured AAA, compromising their chances of survival from a ruptured AAA. In reality, due to the more complex and challenging anatomy seen in the emergency setting, a greater proportion of patients are likely to be unsuitable for EVAR than in the elective setting, further limiting the pool of cases available for operators to gain and/or maintain competencies.
6. The vast majority of EVAR procedures in the UK are undertaken by interventional radiologists, although vascular surgeons are now also training to perform EVAR. The marked reduction in EVAR caseload that would result from implementation of the draft guidance would make it almost impossible for both groups of professionals to gain and maintain skills for EVAR. Given the comprehensive catheter and guidewire skills possessed by IRs, pragmatism would dictate that the limited number of EVAR cases would be performed by IRs, in order to concentrate expertise.
7. It is envisaged that the national AAA screening programme will reduce the AAA rupture rate in the future. In this scenario, and given the arguments above, it seems inconceivable that any vascular unit will be able maintain EVAR skills in enough individuals to enable them to continue offering EVAR for ruptured AAA.
8. The guidelines as they currently stand will result in loss of patient choice in the elective setting, where the NICE Committee have arbitrarily chosen improved long term outcomes seen with open repair to be more important than improved shorter term outcomes seen with EVAR; this in a population of patients for many of whom long term survival is not a realistic outlook and therefore irrelevant.
9. The inevitable consequence of the removal of EVAR for the management of AAA in the elective setting will be a marked reduction in the number of practitioners able to train or maintain competence to perform the procedure. This will result in loss of patient choice in having EVAR in the emergency setting, with consequent direct increase in mortality in the ruptured AAA patient.

In addition to many of the cogent arguments from other stakeholders which the NICE Committee will need to consider relating to the clinical aspects of elective EVAR, they also need to consider and outline how training and service provision of EVAR for ruptured AAA would be feasible in the absence of an elective EVAR programme within England and Wales.

RCR IR Committee  
28 June 2018