Thoracic aortic transection (TAT) occurs as a result of a significant deceleration injury, commonly as a result of road traffic accidents. It is rarely isolated in its occurrence and is often associated with multiple injuries. It has an extremely high mortality, estimated to be 80%. Many cases that result in free intra-thoracic rupture die at the scene of the accident whilst those reaching hospital usually have a contained leak. Traditionally, open surgical repair via a left thoracotomy was the procedure of choice, however, it is associated with a significant operative mortality and morbidity, particularly paraplegia. The use of a less invasive method of repair, therefore, seems common sense and advantageous in the management of TAT in the multiple injured patient. The literature is awash with retrospective and prospective case series describing the technical feasibility and early results of stent-graft repair for TAT. To date there are no published randomised controlled trials comparing endovascular repair to open surgery and realistically this is unlikely to ever happen due to the complexity and the urgency of these cases. In this issue, Mohan et al., present a further prospective case series of 16 patients presenting with TAT over a seven year period, to a teaching hospital in Sydney, Australia. The results presented in this article compare favourably with previously published work. The data presented in this article highlights the low mortality at thirty days along with the low complication rate for endovascular repair of TAT. The authors also display the comparable results for those cases that were performed by open repair. It is difficult to make any direct comparisons between these techniques as the numbers are low and non-randomised. The authors have highlighted that the number of cases performed by open repair diminished over the seven year period whilst those undergoing endovascular repair have inversely increased. So much so, that the first line, treatment of choice for those presenting with TAT, is an endovascular approach. Obviously, adopting this treatment strategy can be problematic. Cardiac and vascular surgeons and radiologists need to be in agreement with this treatment strategy and work closely together to implement local protocols for the management of these patients. To offer such an emergency service with prompt repair needs the availability of trained staff and most importantly a consignment stock of on the shelf devices of varying diameters and lengths. The authors demonstrate clearly the range of sizes that were required for the cases presented, which is helpful information for any clinician looking at setting an emergency thoracic EVAR service.

One of the main drawbacks of this technique is that there is very little long-term published data on its durability. Follow-up was a limiting factor in this study and the authors have touched upon one of the main reasons for this, being non-compliance for long term follow-up by a young cohort of patients. This continues to occur despite educating these...
patients on the necessity of repeated imaging and surveillance. Unfortunately, this is a well recognised issue with younger patients who require long term surveillance.

This paper shows the change in practice that has occurred in this centre in the treatment of thoracic aortic transection, which is likely to be mirrored in many centres over the world. In the absence of randomised controlled trials, it is imperative that all cases of endovascular repair of thoracic aortic transections are entered into a registry and an attempt is made to monitor these patients in the long-term.