This report documents the results of 52 patients after endovascular stent grafting of the descending thoracic aorta from 12/2000 to 6/2006. Indication for endovascular treatment were degenerative thoracic aortic aneurysms (n= 14), Stanford type B dissections (n=13), intramural hematomas with complicated course (n=4), ruptured thoracic aorta aneurysms (n=7), traumatic aortic ruptures (n=8), and penetrating atherosclerotic ulcers (n=12). 32% of the patients underwent emergency treatment. In 17% of the patients an infrarenal aortic aneurysm repair was performed previously.

Overall 30 day mortality was 6.4%, major complications were pneumonia (n=9), cerebrovascular accident (n=4), acute renal failure (n=3) and colic ischemia (n= 1). The endoleak rate was 14%. This results are excellent with respect to the high rate of emergency interventions.

This is a interesting retrospective analysis about endovascular treatment of descending thoracic aortic disease in 52 patients. The outcome is favourable compared to open surgery.

The authors states, that cerebrospinal fluid drainage or other adjunctive therapy to prevent spinal cord ischemia was not routinely used. In which patients was it used and what kind of adjunctive therapy does they mean?

On page 14 the implant of a cuff at the endoleak site is described. What kind of cuff was used and how was the implantation performed. This findings are part of the results and should be attached to the chapter “Endoleaks”.

There are some grammatical and sentence structure errors in the manuscript (e.g. p.5, last line: coronarographic, p.6, line 17 laparatomy, p.7 line 1,2,11,12, etc.)

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.