

MEETING ABSTRACT

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# Thoraco-abdominal aortic conventional surgery in elderly population

P Mastroroberto

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## Background

Thoraco-abdominal aortic pathologies are universally considered as lethal conditions. The most prevalent etiology is atherosclerotic or degenerative but other etiologies such as mycotic, post-traumatic, connective tissue disease-related and dissection-related are also encountered. The estimated actuarial 1-year and 5-year survival rates in patients with thoraco-abdominal aortic aneurysm is 60% and 20% respectively in untreated patients [1,2]. The prognosis, with or without treatment, is complicated by high incidence of comorbidities and is strictly related with a predominantly elderly population. Since the early '90s many Authors have investigated the efficacy of endovascular treatment in the treatment of thoracic and thoraco-abdominal aortic aneurysms and/or complicated aortic dissections. On this basis we believe that conventional surgery may be reserved also in patients over 70 years-old in absence of severe preoperative comorbidities such as chronic obstructive pulmonary disease, renal insufficiency, coronary artery disease, cerebral vasculopathy.

Our surgical approach involves graft replacement between the distal aortic arch and the descending thoracic aorta through a left posterolateral thoracotomy preparing proximal and distal aortic cuffs using biological glues and external strips of Teflon felt to reinforce the wall. Moreover cerebrospinal fluid drainage by a catheter inserted at the level of L3 or L4 to maintain a pressure of 10 mmHg or below and perfusion of the distal aorta using femoro-femoral bypass is performed. All patients are positioned on the operating table in the lateral position with the abdomen and the pelvis turned so that the groin was at a 45 angle to the table to allow cannulation of the femoral vessels.

In a preliminary study comparing endovascular and conventional surgery treatments in patients with acute type B aortic dissection, the early results regarding hospital mortality and postoperative complications are in favour of endovascular management but no significant differences are found in terms of survival at 1, 3 and 8 years.

## Conclusions

Conventional surgery in the treatment of thoracic and thoraco-abdominal aortic pathologies also in elderly population may be considered an effective procedure in the era of stent graft. The aim of further randomized studies study is to demonstrate the real superiority of endovascular procedure over open surgery and to define its role in the treatment of aortic pathologies especially in terms of mid and long-term follow-up.

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## References

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