Acute aortic dissection: epidemiology and outcomes

Pacini D, Di Marco L, Fortuna D, Belotti LM, Gabbieri D, Zussa C, Pigini F, Contini A, Barattoni MC, De Palma R, Di Bartolomeo R.

Source
Department of Cardiac Surgery, S. Orsola-Malpighi Hospital, University of Bologna, Bologna, Italy.
dav.pacini@gmail.com

BACKGROUND
Little epidemiological information on acute aortic dissection (AAD) is available in the literature. The objective of the present study was to determine the incidence and mortality rates of AAD in the general population and to analyze its clinical features.

METHODS
Data from the Emilia-Romagna regional database of hospital admissions was analyzed. Urgent admissions with the diagnosis of dissection of the aorta, dissection of the thoracic aorta and dissection of the thoracoabdominal aorta were selected.

RESULTS
Between January 2000 and December 2008, 1499 Emilia-Romagna residents were hospitalized with a diagnosis of AAD. The patients were divided into three groups: Group A, 617 patients (41.2%) surgically treated for type A AAD; Group B, 93 complicated patients (6.2%) with type B AAD treated by endovascular stent-grafting and Group C, 789 patients (52.6%) suffering from any type of AAD medically treated. The overall annual incidence rate was 4.7%/100,000 people and was higher for men than for women (6.7% vs 2.9%).Two hundred ninety-six patients (19.8%) were 80 years of age or older.The overall in-hospital mortality rate was 27.7%, with mortality rates of 21.1%, 26.9% and 33% in Groups A, B and C, respectively.

CONCLUSION
The incidence of AAD is not negligible and a notable rate of patients is ultra-octogenarian. A large number of patients with AAD had no surgery or interventional treatment. The results of surgical treatment for patients with type A dissection are acceptable but the results obtained in patients with complicated type B dissection who were treated with an endoprosthesis are dismal.