Cardiovascular Surgery

Multicenter Registry of Acute Aortic Dissection. The RADAR Study. Preliminary Results

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Background
Acute aortic syndrome (AAS) still represents one of the most severe cardiovascular conditions due to its high mortality and morbidity; for this reason, it is extremely important to perform an early diagnosis of the disease.

Objectives
The *Registro de la Sociedad Argentina de Cardiología de Disecciones AóRticas Agudas* (RADAR registry) was designed to analyze the modalities of clinical presentation, diagnosis, treatment and mortality of AAS through a continuous registry of this not very prevalent disease.

Material and Methods
From February 2007 to April 2009, 95 patients consecutively admitted to 12 centers with a diagnosis of AAS were enrolled; basal clinical characteristics, complementary studies, type of treatment and clinical outcomes were obtained.

Results
Most patients were men (68%), mean age was 58.8±13.9 years, 78% were type A aortic dissections and 22% were type B. Eighty four percent of patients had hypertension, 28% were current smokers and 24% had dyslipemia. Chest pain or dorsal pain was present in 85.1% of cases. Global median time interval from onset of symptoms to intervention was 18 hours (12-72). Surgery was performed in 89% of type A and in 15% of type B dissections. Beta blockers were used
in 64.7% of cases, sodium nitroprusside in 47.4%, aspirin in 15.8%, oral anticoagulant agents in 3.2% and thrombolytic drugs in 3.2%. Global mortality was 32.6%. Mortality rate of type A dissection was 37.8% (31% in patients undergoing surgery versus 87.5% in absence of surgical treatment; p=0.01). Dissection type B had mortality rates of 14% versus 12%, respectively (p=ns). A pattern of circadian variation regarding onset of symptoms was observed, with a peak in the morning hours. Logistic regression analysis showed that the independent variables associated with in-hospital mortality were age >70 years and the presence of hypotension or shock at admission.

Conclusions
Mortality from AAS is still high despite technical progress. Physicians should be alert to detect this condition in order to perform early diagnosis and treatment. This type of continuous and multicenter registry allows a more real approach to the problem related to this severe disease in our environment in order to optimize diagnostic and therapeutic strategies.