

Aortic Dissection in a Swedish Population – Patient Characteristics, Symptoms and Mortality

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Background

Aortic dissection (AD) is a serious condition requiring prompt diagnosis and treatment. However, knowledge about patients with AD in current emergency care is sparse. We aimed to investigate patient characteristics, chief complaints, and 30-day outcome of Swedish AD patients.

Methods

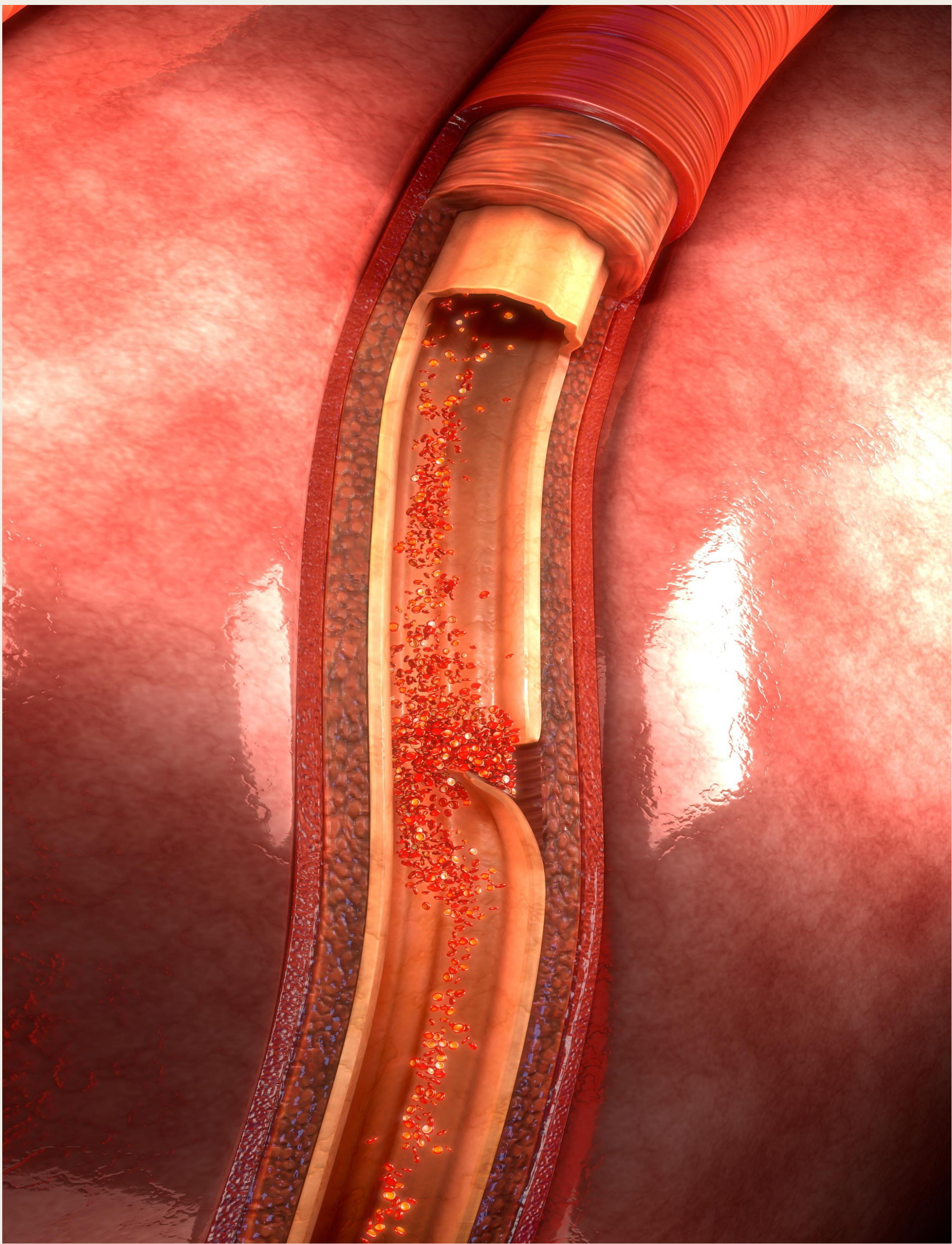
The study included all emergency department (ED) patients in Lund and Helsingborg Jan 1, 2010 - Dec 31, 2014 with a final discharge diagnosis of AD. All data were retrieved from the EXPECT database which contains information on all patients with an ECG registered at the EDs in Lund, Helsingborg, Odense and Esbjerg in 2010-14. Major adverse cardiac events (MACE) was defined as acute coronary syndrome, cardiac arrest, cardiogenic shock, ventricular arrhythmia or high degree AV-block requiring intervention, or death from a cardiac or unknown cause. Acute cerebrovascular disease was defined as subarachnoid hemorrhage, brain hemorrhage, cerebral infarction or transient ischemic attack.

Results

Of the 131 patients included, 78 (60%) were male. The mean age was 67.8 years (SD 12.6), and the females (mean 71.3 years) were significantly older than the males (65.4 years, $P=0.008$). Fifty patients (38 %) had a history of hypertension, and 31 (24 %) had a history of aortic aneurysm (AA). The patient group had 18 different chief complaints at the ED, with chest pain (45.0 %) being the most common (Table). The 30-day mortality was 9.9 %, and the risk of MACE and acute cerebrovascular disease within 30 days were 8.4 % and 12.2 %, respectively.

Conclusions

The majority of AD patients are males, and previous hypertension and AA are common. The typical presenting complaint is chest pain, but most patients have other chief complaints. AD patients have a substantial 30-day risk of death and major adverse cardiovascular events.



Aortic Dissection.
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Table. Chief complaints at the ED

Chief complaint (n, %)	AD patients (n=131)
Chest Pain	59 (45)
Abdominal Pain	12 (9.2)
Dyspnoe	10 (7.6)
Neurological deficit/Stroke/TIA	7 (5.3)
Back Pain	5 (3.8)
Extremity Conditions	5 (3.8)
Syncope	4 (3.1)
Unspecified	4 (3.1)
Data Unavailable	11 (8.4)

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