

Sudden cardiac death in the elderly: 5 years study

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Introduction:

Sudden cardiac death (SCD) is defined as the unexpected natural death of a cardiovascular cause in any circumstance and at any age. although SCD in the elderly is not exceptional, publications in this area are rare.

The aim of our study was to highlight the epidemic peculiarities of sudden cardiac death in elderly people in northern Tunisia.

Materials and methods:

We conducted a retrospective study over a period of 5 years (January 2014-December 2018) on all cases of sudden cardiac death of the elderly subject (age over 60 years) autopsied in Tunis forensic medicine department.

Results:

- During the study period, 596 cases were recorded, accounting for 43% of all sudden cardiac deaths in adults
- The population was 462 men (77.5%) and 134 women (22.5%), with an average age of 70 ± 7.4 years. They were married in 48,2% of cases and they lived in urban areas in 70,8% of cases.
- Smoking, high blood pressure and diabetes were the most common cardiovascular risk factors, with 43.8%, 46.3% and 33.7% of cases, respectively.
- A history of heart disease was identified in 35.6% of victims.
- The death occurred at home in 63.8% of cases. We also recorded a winter excess mortality (16.5%) with a peak during the month of January.
- The main symptom preceding death was syncope (30%).
- Ischemic heart disease (fig 1) was the most common cause of death with 384 cases (64.4%) followed by hypertrophic heart disease (13.3%) and dilated heart disease (9.7%).(fig2)



Figure 1: Myocardial wall is buff yellow with hemorrhagic recent myocardial infarction.

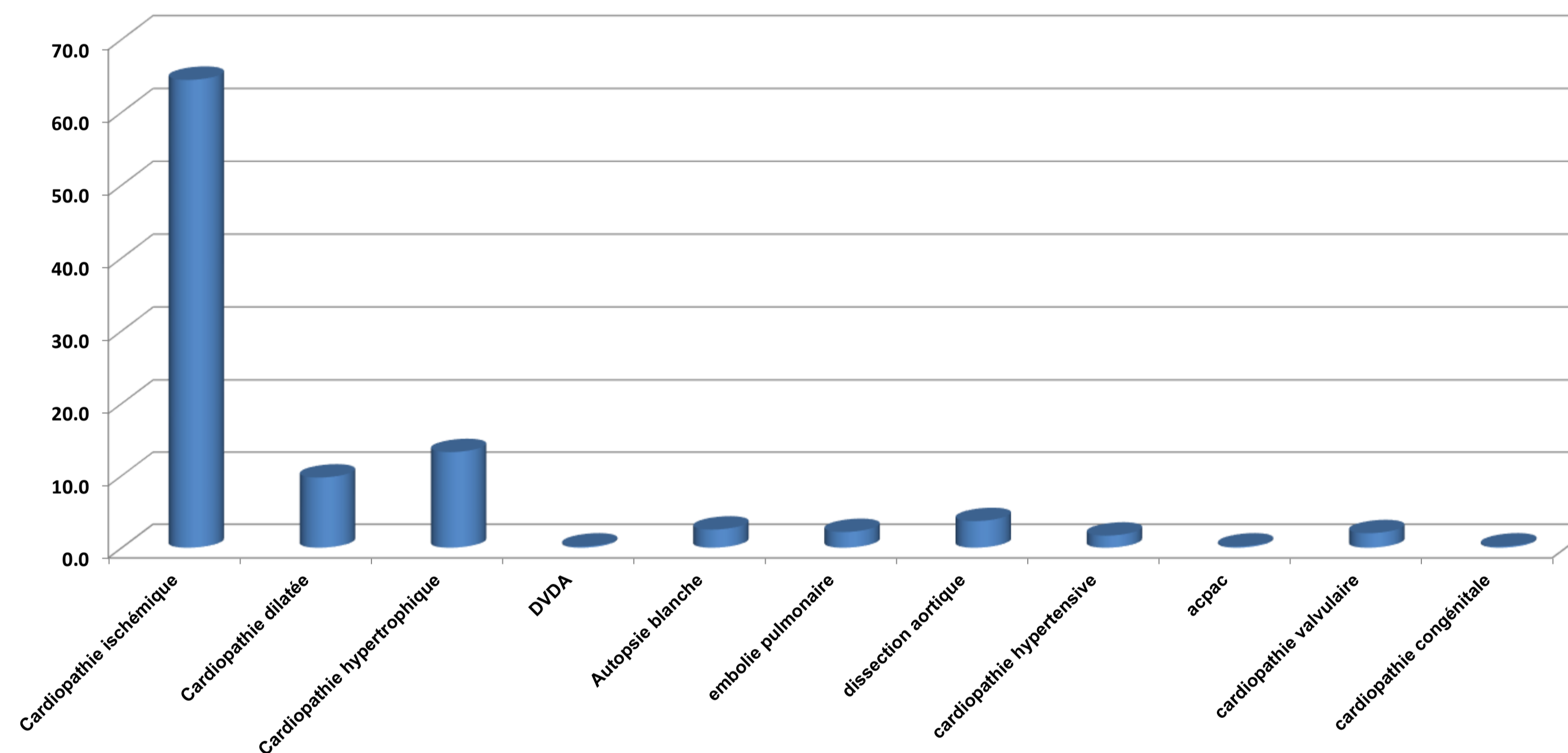


Figure 2 : Distribution by cause of death in the elderly

Discussion:

- ❑ In agreement with the literature, the profile of victims emerging from our study is that of a male subject whose average age is 70 years, married, urban, smoker with a history of heart disease.
- ❑ The seasonal distribution of mortality due to coronary events shows peaks during periods of cold weather. Blood pressure increases during the cold season. Acute cold exposures precipitate anginal attacks, ischemic changes in the electrocardiogram and arrhythmias. Older people and people with cardiovascular disease are particularly sensitive to cold.
- ❑ In Tunisia, sudden death of ischemic origin is the most common cause in the elderly while it represents the fifth cause of sudden death of the young subject. The risk of sudden ischemic death increases with age, in relation to the frequency of comorbidities, the atypical clinical presentation and the delay in the medical care of the elderly.

Conclusion :

Despite medical advances in diagnostics and therapeutics, the SCD rate of the elderly remains important. Cardiovascular risk factors control is necessary.