

Case Report

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Myocardial Infarction and Rupture of the Left Ventricle After Sexual Intercourse

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Abstract

A 59 year old caucasian male died after having sex with a prostitute. The medicolegal autopsy reported a sudden death due to hemopericardium tamponade associated with myocardial infarction and coronary artery disease. As a comorbidities we considered the death was related to overweight and type 2 diabetes. Sudden death reported during sexual intercourse has low incidence rates but when it occurs while having extramarital sexual activity, a thorough study of the cause, manner and circumstances of death is required.

Keywords

Sudden death; Hemopericardium; Medicolegal autopsy

Introduction

Sudden death during coitus has low incidence rates. When it occurs while having extramarital sexual activity, a thorough study of the cause, manner and circumstances of death is required.

Case Report

A 59 year old caucasian male died after having sex with a prostitute. The medical antecedents were type 2 (non-insulin-dependent) diabetes mellitus and smoking cessation one week before. At the scenario there was not evidence of or related to criminal activity and the forensic autopsy was carried out.

The corpse was 1.88 m tall, weighed 95 Kg and body mass index 26.87 Kg/m² (overweight). The internal findings were: chronic obstructive pulmonary disease, generalized atherosclerosis, cardiac tamponade (250 cc of hemopericardium accumulated) (Figure 1) associated with a myocardial infarction and rupture of the left ventricle (Figures 2 & 3). There was a narrowing of the lumen more than the 75% of the proximal portion of the left anterior descending coronary artery almost immediately after its origin.

The postmortem blood alcohol concentration was of 0.35 g/L and there was not evidence of other drugs.



Figure 1: Hemopericardium.

The medicolegal autopsy reported a sudden death due to hemopericardium tamponade associated with myocardial infarction and coronary artery disease. As a comorbidities we considered the death was related to overweight and type 2 diabetes.

There was no medical report of previous myocardial infarction of the deceased.



Figure 2: Rupture of the left ventricle as a complication of a transmural myocardial infarction.

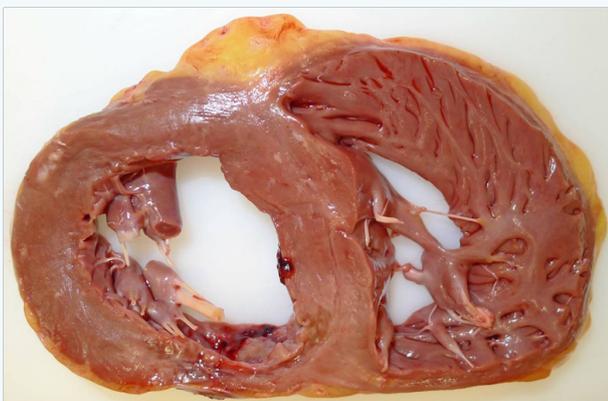


Figure 3: Thinning of the left ventricular wall and rupture. Myocardial infarction.

Discussion

Spanish legislation requires for every deceased a certificate to be issued which is to be signed by the last attending physician. In our case the physician was not asked to sign the death certificate so the medicolegal autopsy was performed in our Medico Legal Institute.

Sometimes sudden death is related to a myocardial infarction during or after sexual intercourse. But how often does it occur?. Case-crossover studies investigating the association between episodic physical or sexual activity and myocardial infarction or sudden cardiac death concluded that acute cardiac events were significantly associated with episodic physical and sexual activity; and that this association was attenuated among persons with high levels of habitual physical activity [1]. Sudden death reported during sexual intercourse has low incidence rates (0.6%–1.7%) [2-4]. Of the subjects who died during coitus, 82% to 93% were men, and the majority (75%) were having extramarital sexual activity, in most cases with a younger partner in an unfamiliar setting and/or after excessive food and alcohol consumption and/or Sildenafil ingestion [5].

Meta-analysis of 4 case-crossover studies, which consisted of 50% to 74% males predominantly in their 50s and 60s, showed that sexual activity was associated with a 2.70 increased relative risk of myocardial infarction compared with periods of time when the subjects were not engaged in sexual activity [6].

Conclusion

In our case there was a rupture of the myocardium as a complication of a transmural myocardial infarction. This is most likely to occur in the first week between 3 to 5 days following the initial event, when the myocardium is the softest.

The interview with the family, especially with the wife, in cases like this is particularly embarrassing when information about the circumstances of the death is required.

Acknowledgement

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