

The Death Before Run Over By A Car

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Citation

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Abstract

The cause of death related coronary events needs be differentiated from the blunt traffic trauma, but this can be difficult. In sudden cardiac death, the use of the standarddiagnostic criteria of acute myocardial infarction may be difficult, as both serum cardiabiomarkers and electrocardiogram can be influenced by previous cardiac arrest. In thiscase report, a 77-year-old man was lying on the road and run over by a car. The autopsyrevealed acute myocardial infarction with severe coronary atherosclerosis and deniedthe blunt traffic trauma.

INTRODUCTION

The heart's position between the sternum and vertebral column makes it vulnerable to injury from blunt chest trauma. Symptoms may be wrongly attributed to traumatic chest wall pain. [1] Both conditions may produce myocardial enzyme elevation, electrocardiogram (ECG) abnormalities and wall motion abnormalities on echocardiography. ECG changes in blunt cardiac injury may reflect myocardial injury, q waves ST elevation or depression, conduction abnormalities, arrhythmias or non-specific changes, such as a prolonged QT interval. [2] Acute myocardial infarction (AMI) claims resulted in the highest percentage of paid claims (53.1%) and the highest average payment. [3] The autopsy showed a case of AMI with severe coronary atherosclerosis.

CASE REPORT

A 77-year-old man, with an angina pectoris, was lying on the road and run over by a car. He was transported to the emergency department. He was already cardiopulmonary arrest on arrival and did not recover despite of the resuscitation. We investigated the cause of death at autopsy on the next day. He was 163cm tall and weighed 58.5kg. The

external examination revealed cardiopulmonary resuscitation marks on his chest, multiple rib fractures and the pelvic fracture, but postmortem lividity was not little. (Fig.1) There were not hemorrhage around the each fractures. Autopsy and histological examinations revealed that the left coronary artery was hardened by severe atherosclerosis and the cardiac muscle was performed fibrosis and necrosis. (Fig.2.3)

Figure 1

Figure.1 There were not hemorrhage around the each fractures.



Figure 2

Figure.2 The left coronary artery was hardened by severe atherosclerosis.

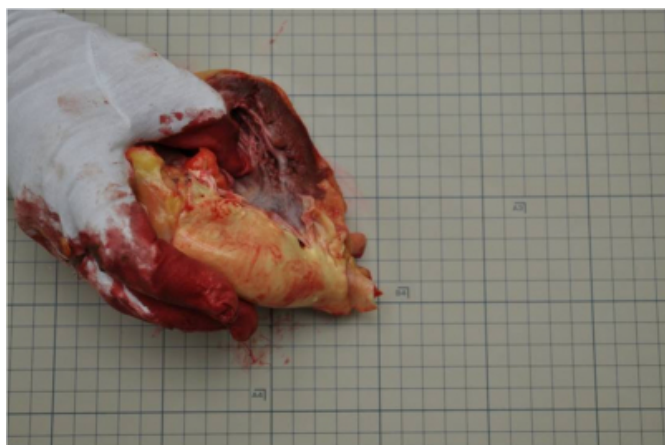
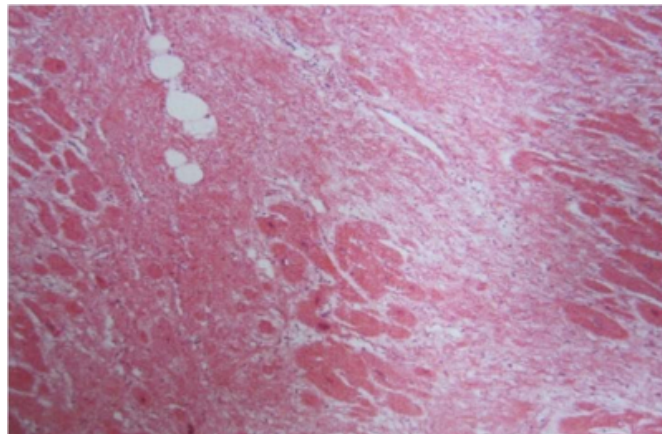


Figure 3

Figure.3 Histological examinations revealed that the cardiac muscle was performed fibrosis and necrosis.



DISCUSSION

The most common cause of sudden cardiac sudden death is coronary artery disease.

[4.5] The use of the standard diagnostic criteria of AMI may be difficult, as the analysis of pre-arrest symptoms is often impossible and both serum cardiac biomarkers and ECG can be influenced by previous cardiac arrest and cardiopulmonary resuscitation. [6]

Up to 50% of the medical negligence claims arising in general practice result from an allegation of failure to diagnose a patient's condition.

Currently, acute myocardial infarction is the most prevalent condition involved in these claims. [7] AMI claims

resulted in the highest percentage of paid claims (53.1%) and the highest average payment. [8]

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