

X-ray diagnosis of closed injury of heart

Abstract

The author describes x-ray closed in the first 3-4 heart herbs day after receiving damage to this body. Typically, x-rays are not about suspicions on the injury of the heart, and to identify damage to the ribs, sternum, shoulders and spine, while changing the shape of the heart do not pay attention, or do not attach due importance to this. Moreover, the functions of the heart normally occur against the backdrop of traumatic shock, and the severity of the condition of the victim is connected with them. The author notes the difficulty of topical feature described symptoms, and the importance of a thorough analysis of related clinical symptoms. Only from the totality of those and other symptoms one can suspect a closed injury of heart and begin treatment promptly. X-ray diagnosis on this issue sometimes is critical in the early recognition of this damage.

Keywords: heart closed trauma, early x-ray diagnostics

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Describe early x-ray closed heart injury

Introduction

Mechanical injuries are divided into private and public, which in turn are divided into single (isolated), multiple, simultaneous and combined. Under a single injury means such damage which damaged or only one internal organ, or one segment of the musculoskeletal system and under multiple-two and more. Under the concomitant injury when damaged internal organs various cavities and systems. Under the combined injury when the victim immediately affected by two or more damaging factors (e.g., mechanical and thermal). On the severity of the damage they are divided into incompatible with life, extremely heavy, heavy, moderate and light. On the severity of the condition of the victim: hopeless, threatening, severe, moderate, satisfactory.^{1,2} In recent years, deaths from injuries were 55, 42 to 100 thousand. of the population, with males of working age she was at 11.4-24.5% higher compared to overall mortality. Recently in all countries of the world there has been a rapid increase in injuries. The death rate from injury in peak 30-39 years. The second increase in mortality from trauma begins with 47 years, reaching a peak among persons 80-84 years that related to the general deterioration of the health status of the age. Men are dying from injuries in 2 times more often than women, while in the age group 20 -29 years 5.7 times, and in the 30-39 years, 5.9 times. Out of the total number of dead at 58-68% of alcohol. Out of the total number of injured persons, at the pre-hospital stage perishes 56.1% and at home-10.5%.^{3,4} One of the causes of death of the victims is a closed heart trauma that accompanied it. Diagnosis of such damage usually occurs when the autopsy. It should be recalled that often failed in carrying out resuscitation on human excretion from clinical death, both times, and linked to the injury of the body.^{2,5} If the victim has remained alive, the diagnosis is usually exhibited by the characteristic clinical symptoms and ECG data. To targeted radio diagnosis heart injury rarely resorted to, because its considered little informative.^{1,6,7} Some assistance in this matter could have a computed tomography and digital systems, but clinicians use these methods usually to find bone pathology and not enough heart injury.^{8,9}

Materials and methods

Out of the total number of victims with closed injury of chest, with up to a thousand people, was chosen by a group of persons (28 people) aged from 18 to 50 years old, who during his lifetime was radio graphically fracture of ribs and sternum, and suspected of having perpetuated closed injury of the heart. They all filed complaints of severe pain behind the breastbone, shortness of breath and palpitations. Noted low (90-80-60-40mm Hg) and unsustainable AD. ECG changes were typical of a myocardial infarction. When performing a chest x-ray in two projections, drew attention to the arrhythmia and heart increase in size, as well as the flatness of his waist. Injury they received during a road traffic accident. From the first hours from the moment of their hospital treatment was started, which is usually held in myocardial infarct.

Results

Despite these efforts, remained resistant hypotension and arrhythmia. Through 4-8 hours for all evolved anural, and soon died, and death. Treatment duration ranged from 18 to 42 hours. On autopsy the presence of a closed heart injury confirmed all these casualties were hurt that body without violating his integrity. In the zone of injury there were breaks of hotbeds of hemorrhages. Heart muscle was in a State of melkoochagovoj fragmentation.

Discussion

All the victims died in the acute heart injury that lasts 2-3 days. At this time there is a violation of the rhythm of his cuts. Heart loses its typical configuration that is expanding in all directions, he disappears and contractile amplitude decreases waist movements. This x-ray picture is clearly identified and requires appropriate action to rescue the victim. Self correction of organ function, usually not the case.

Conclusion

In closed traumatic rupture of heart suffering victims at the scene. Organize resuscitation succeed only when injuries that organ. At this time in diagnosing damage of a x-ray study can help. In the acute period damage to typical symptoms of a closed heart injury can

be attributed to the expansion of its borders in all directions, the disappearance of Dalia, arrhythmia and a decrease in the amplitude of contractions. These symptoms must be taken into account when diagnosing this damage.

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None.

Conflicts of interest

The author declares that there is no conflicts of interest.

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