



H79 Sudden Death in a Case of Hiatal Hernia Mimicking a Bochdalek Hernia

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Learning Overview: After attending this presentation, attendees will understand the forensic problems related to a fatal case of a giant hiatal hernia in an older patient. Particularly, a complete forensic approach by means of clinical data collection, autopsy, microscopic, and toxicological investigation led to the conclusion that the cause of death was a cardiac compression resulting in electromechanical dissociation.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by serving as an example that can help identify a cause of sudden death potentially underdiagnosed. This study provides information regarding a rare occurrence reported through the clinical history and the results of the forensic investigation, providing an in-depth and complete point of view.

A 72-year-old man who had no relationship with his family was found dead in a farmhouse near Rome, Italy. The inspection of the place of death and the external examination of the body by police officers strengthened the hypothesis of a natural death. For this reason, a diagnostic autopsy was performed on the body.

The circumstantial data collected before autopsy, in particular the patient's medical history, suggested that the subject was suffering from a condition of gastroesophageal reflux, but no references to other pathologies have been found. In addition, a toxicological screening test was conducted that gave a negative result.

At the inspection of the thorax, marked emphysema of the right lung was found and the left pleural cavity appeared to be occupied by a voluminous mass that was determined as a subatelectasia of the left lung. Opening of the pericardial sac revealed a condition of adhesive pericarditis. Microbiological samples were also taken, with negative results, and the histological study of the pericardium confirmed the irritative condition.

In examination of the abdominal cavity, the omentum, the transverse colon, the stomach, and the pancreas were absent, with an evident dislocation to the left lobe of the liver. After the mass wall was opened, all the omental apron, the stomach, the transverse colon, and part of the pancreas were detected inside. After a cautious removal of the hernial content, it was evident that the hernial gate was represented by the diaphragmatic hiatus, in absence of congenital alterations of the diaphragm.

This case reports how a giant hiatal hernia that simulates a Bochdalek hernia can lead to sudden death by multiple mechanisms. Compression of the heart can induce the development of cardiac arrhythmias or, as is also shown in this case report, lead to the development of irritative pericarditis. This case demonstrates how a mild pathology, if neglected, can lead to sudden death.

Hiatal Hernia, Sudden Death, Case Report