

H61 Multiple Suicidal Gunshot Wounds in Italy: Case Reports and Medicolegal Considerations

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Learning Overview: After attending this presentation, attendees will have improved their knowledge about the medicolegal investigations in cases of multiple gunshot wounds in order to establish the mechanism and cause of death and, therefore, to differentiate the suicidal, homicidal or accidental manner of death.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by discussing two case reports of uncommon multiple Self-inflicted Gunshot Wounds (SGW). In this context, the important role of the death scene analysis, postmortem Computed Tomography (CT), and autopsy findings and clinical-circumstantial data were emphasized. Additionally, a presentation of 3D reconstruction of the death scenario is provided to better clarify the shooting dynamics.

Case 1: An 81-year-old male was found dead sitting in a chair on the veranda of his own house by his relatives (his wife and her cousin). During the death-scene investigation, blood was found on clothes, on the chair, and on the floor under it. Two round lesions were observed on the anterior surface of the t-shirt and below the left hemithorax, and one round lesion on the posterior surface of the chest, the above corresponding t-shirt area, and the back of the chair. The right hand showed some characteristic blood spatter. A semi-automatic pistol (Beretta[®] model 70, .32 Automatic Colt[®] Pistol [ACP]) containing five cartridges, with a cocked hammer, was found on the floor between the left foot of the subject and the left anterior leg of the chair. Two cartridge cases were found on the floor, behind and in close proximity to the body. No mental illness or relevant organic pathologies were identified. Social and family histories did not reveal any salient information. Postmortem examination included Computed Tomography (CT) and autopsy and highlighted the presence of two entrance "near contact" gunshot wounds on the left pectoral region. On the posterior chest area, one exit gunshot wound was found, as well as a retained projectile under the skin. Both bullet trajectories were intrathoracic. Death was certified due to hemorrhagic shock from cardiac and pulmonary lesions from SGW.

Case 2: A 64-year-old man was found dead on the kitchen floor of his house. The body was in a semi-prone right-side position, surrounded by blood. Body examination revealed three penetrating lesions to the head, two on the right parietal region and one on the opposite parietal region. A semiautomatic pistol (Beretta[®] mod. 950, .25 ACP) was found under the body. History revealed that the subject suffered from flaccid paraplegia and had family conflicts. Postmortem examination included CT and autopsy and highlighted the presence of two entrance wounds identified as "contact" gunshot injuries on the right parietal region. Moreover, on the left parietal region, one exit gunshot wound and a bone-lodged retained projectile were detected. The cause of death was attributed to brain lesions from SGW.

Multiple gunshot wounds are suggestive of homicide, especially when they are reported to the head. In these cases, accurate forensic and medicolegal investigations are fundamental to accurately differentiate and classify the death. In the reported cases, collected data and information allowed us to classify the deaths as suicide. Suicides were supported by analysis of the circumstantial information, the type and characteristics of the weapon, the location and the characteristics of the gunshot wounds, the study of damaged organs and the evaluation of the decedent's "ability to act" voluntarily in the survival time.¹ Moreover, a literature review of cases of SGW was performed, revealing interesting common features. Finally, both of the discussed cases confirmed that most suicides involving a weapon in Italy occur at home, involve older male subjects, are firearm-related (short weapons, most frequently), and involve the head and chest regions.²

Reference(s):

- Arunkumar P., Maiese A., Bolino G., Gitto L. Determined to Die! Ability to Act Following Multiple Self-inflicted Gunshot Wounds to the Head. The Cook County Office of Medical Examiner Experience (2005-2012) and Review of Literature. J Forensic Sci. 2015 Sep;60(5):1373-9.
- Gentile G., Clerici C., De Micheli A., Merzagora I., Palazzo E., Rancati A., Veneroni L., Zoja R. Analysis of 16 years of homicides and suicides involving the use of weapons recorded at the Milan Medicolegal Bureau. *J Interpres Violence*. 2013 Jan;28(2):386-415.

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