



D8 Forensic Aspects of Suicides and Multiple Gunshot Wounds

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The goal of this presentation is to find common features in multiple gunshot suicides and to explain the suicidal action in these multiple gunshot suicides.

This presentation will impact the forensic science community and/or humanity by illustrating the difficulties encountered by the forensic medical doctor to explain homicide or suicide.

Introduction: Suicidal gunshots are generally intended to kill rapidly. Therefore, the head and the thorax are the targets in the majority of the gunshots in suicides cases. Sometimes, some people who commit suicide are able to fire two or more gunshots to these body regions. In a 5- year study of 60 autopsies of clearly-defined gunshot suicides, five persons (6.5%) fired two or more gunshots to the body. Among these five cases, one case involved a combination of gunshots to the chest and abdomen and one gunshot to the head without immediate incapacitation. The trajectories were restricted to the chest for the three other cases. The goal of this presentation is to find common features in multiples gunshot suicides and to explain the suicidal action in these multiple gunshot suicides.

Materials and methods: The 2000 to 2005 autopsy records of the forensic institute of Lille were checked for clearly defined gunshot suicides. The autopsy record, the past history, the characteristics of the weapon, the toxicology analysis, the scene of death report were available in all the cases and were used to demonstrate the suicidal characteristics in spite of multiple gunshots wounds in the bodies.

Results: *Case 1:* A 40-year-old woman, suffering from a chronic depression syndrome, committed suicide with a 12 caliber rifle. She performed three gunshots in the abdominal area and one in the head. Findings of scene crime and autopsy were used to determine that suicide was intended. These elements are described and detailed. *Case 2:* A 30- year-old police officer committed suicide in his car with his service gun. His suicide occurred in front of other police officers approaching the car; they had been called by his wife. An autopsy was performed in order to confirm the origin of the weapon. Survival time was studied to explain the possibility of these four gunshots. *Case 3:* A 75-year-old man killed his wife with three gunshots and then shot himself six times in the thoracic area. This was diagnosed as a case of post-aggression suicide. *Case 4:* A 35 year-old man killed his son and took his car. The weapon used was a 12 caliber rifle. He committed suicide with the same weapon in his car. During the autopsy, an entrance wound was discovered in back area. The origin of this wound was not due to his rifle; the bullet was shot by policemen chasing the man's car and trying to stop him. The survival time was mentioned and compared to literature. *Case 5:* A 60-year-old man killed himself with two gunshots with a 22 caliber revolver. The reason for the suicide was determined to be financial debt. Crime scene was analyzed and autopsy performed in order to determine the weapon used and if suicide was intended.

Discussion: The incapacitation is important to be considered and a general classification (immediate, late) can be determined and illustrated by the cases presented. The survival time, the type of weapon, the characteristics of weapon (automatic, semi-automatic), the location of the gunshot wounds, the lesions of deep organs observed during the autopsies are described, studied and used to determine a classification in order to differentiate a crime from a suicide. Suicide can only be excluded if immediate incapacitation injuries are caused by more than one bullet. Some aspects as mental or emotional state of the victim, especially the expectancy of being prepared for a hit, have an important role. The autopsy is of course necessary. The amount and the location of tissue disruption must be established with an autopsy in order to estimate the potential for physical activity following the injury. For long firearms, a comparison between the path of the trajectory and the anatomical features is important. All these aspects are discussed and compared to the forensic literature of multiple gunshot wounds in cases of suicide. A large iconography is associated to illustrate the cases presented.

Gunshot Wounds, Multiple Gunshot Suicide, Incapacitation