



Pathology/Biology Section - 2015

H55 A Complex Bullet Path: Entrance in the Head, Exit Through a Body Orifice, and Re-Entrance in the Arm

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After attending this presentation, attendees will have a better appreciation of unusual bullet paths in forensic practice, illustrated by a re-entrance wound in the arm, coming from a shot in the head which then exited through a natural body orifice.

This presentation will impact the forensic science community by providing an original example of a complex suicide following a homicide, with multiple gunshot wounds in the head, a re-entrance wound in the arm, and no visible exit wound.

Homicide-suicide is a particular form of interpersonal violence; it refers to the act of homicide followed by suicide of the perpetrator. Homicides followed by suicide patterns differ from both homicides and suicides internationally. In France, a homicide-suicide does not frequently result in a charge or trial. In this case, the findings at the crime scene initially led to a double-homicide suspicion due to the presence of multiple gunshot wounds.

A 58-year-old man, his wife, and their dog were found dead at home. He was lying on his bed in a supine position with three gunshot entrance wounds, one on the forehead, one next to the left temporal point, and one in the right arm. An unregistered .22 LR handgun (next to the bed, on his right side) and multiple fresh bloodstains were found in the bedroom. The wife was lying in a semi-supine position on the floor of their living room in a fresh pool of blood with a gunshot entrance wound on the vertex and no exit wound. No medical history was documented for either of them. Their dog also had a gunshot wound at the top of the head with no exit wound.

A radiological examination and autopsy of the man identified two bullets, one next to the C4 vertebra and one in the right arm. Three bullet trajectories were observed. The forehead wound had a close-range firing aspect, with soot depositions and a star-shaped laceration. The bullet's trajectory was through the frontal bone, the ethmoid, and the pharynx. The path from the left temporal entrance wound was through the frontal bone, the cribriform plate of the ethmoid, and the nasal septum. The second bullet was found in the subcutaneous area of the right arm. The three cutaneous wounds were confirmed as gunshot entrance wounds by a pathologist's examination. No other bullet was found at the crime scene or in the corpse. The entrance wound in the left arm was considered to be a re-entrance wound coming from the left temporal trajectory through a natural body orifice: the nostril. In this hypothesis, the decedent would have had his right arm wrapped around his face while he was shooting himself with his left hand. The toxicological analysis for all of the standard samples was negative. After complete investigation, the manner of death was classified as suicide for the man and homicide for the woman.

This case shows the importance of an open mind during the interpretation of bullet wounds paths, especially in complex cases such as this one. Multiple entrance wounds in the head and other locations might be self-inflicted, even if they appear to be suspected homicide.

Gunshot Wounds, Forensic Medicine, Homicide Suicide