



E37 A Homicide by Shotgun: The Other Side of a Widespread Weapon

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The goal of this presentation is to underline how a very careful external examination of the cadaver, as well as a detailed analysis of the crime scene, can shed light on the manner of death in a case of an unusual use of a common firearm.

This presentation will impact the forensic science community by emphasizing the necessity of a careful crime scene reconstruction and a complete methodological external examination of the cadaver in an attempt to reach a certain unusual manner of death.

Shotguns are used in a large number of homicides and suicides, and gunshot wounds are widely reported in the literature. This particular case exhibits circumstances and pathological findings that brought to recognition an unusual use of a common firearm.

This case is of a 50-year-old man, murdered in the garden of his countryside cottage in Gargano, in southern Italy. The forensic team was alerted by the local prosecutor for an "evident" case of shotgun homicide. The man was found at the crime scene lying on the ground, on his right side, with his head partially submerged in a large pool of blood. Several small pellets surrounded the victim and some had targeted the wall of the warehouse. Five plastic cases and one plastic wad were found. A plastic wad was found in the anterior side of the victim's shoulder bag.

The external examination revealed an abrasion on the left side of the face that seemed to reproduce the herringbone-shaped stone floor of the garden, and, on the right zygomatic area, a small quadrangular honeycomb grid abrasion was also present. "Raccoon eyes" with bilateral bleeding from the ears and several firearm wounds on the left shoulder were observed. Postmortem radiological study conducted with a Computed Tomography (CT) scan of the total body revealed a basal skull fracture, a spider web fracture complex of the left side of skull from the frontal to the occipital bone, a fracture of the right zygomatic bone, and five metallic fragments exclusively in the left shoulder.

At the autopsy, five pellets were found under the skin and in the fat layer of the soft tissues of the shoulder. A careful observation of the honeycomb grid abrasion allowed the examiner to connect it to a specific part of the shotgun stock — the so called "recoil pad." A massive subdural, intraparenchymal, and intraventricular hemorrhage, diffuse to the basal cisterns, was found. No histological-specific evidence was reported, except for encephalic samples that exhibited perineuronal and perivascular edema and the presence of a massive hemorrhage of gray and white matter.

Death was attributed to a traumatic brain injury as the result of repeated blows to the head by a blunt instrument; the skin on the right side of the face reproduced the pattern of recoil pad, and on the left side, the herringbone-shaped drawing of the stone floor where the man had been lying. In conclusion, the detailed and careful examination of the injuries and other autopsy findings contributed significantly to arriving at the cause and unusual manner of death due to the back side of a shotgun.

Shotgun Deaths, Firearm Homicides, Crime Scene Investigation