



## H143 Suicidal Firearms Injuries of the Back of the Head/Neck: A Case Series

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Learning Overview: After attending this presentation, attendees will understand that, although rare, suicidal gunshot wounds of the back of the head do occur, and they can involve handguns as well as long guns.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by highlighting four cases of suicide by firearm wherein the decedent shot himself in the back of the head or neck.

Suicide by firearm is relatively common in certain parts of the world. Depending on firearm availability, any gun type may be used for suicide, including handguns, shotguns, and rifles. Common entrance wound sites in suicidal gunshot wounds include the head and chest, with classic head wound locations being the temple, the forehead, the submental chin, and intraoral. Only occasional suicidal gunshot wounds occur in atypical body locations or involve unusual situations. In this report, four cases of suicidal gunshot wounds of the back of the head/neck are presented.

Case 1: A 57-year-old male was on short-term disability from work due to recently diagnosed lupus, with associated encephalopathy, seizures, and severe behavioral changes, including outbursts of anger. He also had severe depression to such an extent that family members had reportedly locked up all of his firearms. After a verbal outburst of anger toward his wife, he entered his basement, then his wife heard a gunshot. A .38 caliber revolver was found near his body. He was emergently transported to the hospital, where he was eventually pronounced dead. At autopsy, there was a tangential, medium-range gunshot wound of his right posterior parietal scalp, with an underlying keyhole defect of the bone, and projectile fragments recovered from within the subcutaneous tissues. The cause of death was a gunshot wound of the head. The manner of death was suicide.

Case 2: A 22-year-old male was found dead in his bathtub on a welfare check after he had not arrived to work for two days. He had texted his father earlier that day, telling him that he loved him and to keep moving forward no matter how grim life might be. He was nude, and there was a recently purchased 9mm semi-automatic handgun in the tub with him. At autopsy, a contact-range gunshot entrance wound was on the posterior midline of the head, with an exit wound of the central lower forehead. According to family members, he was socially awkward and struggled with "sexual identification issues." The cause of death was a contact gunshot wound of the head. The manner of death was suicide.

Case 3: A 50-year-old man was found dead at the edge of some woods, in a field near the rural home that he shared with his parents. He had a history of chronic back pain, depression, anxiety, inability to find employment, as well as financial stress, and had lived with his parents for the past ten years after having been employed as a registered nurse and being arrested and imprisoned on drug-related charges. His father found his body after the father discovered a suicide note in the residence, went outside to look for his son, then heard a gunshot. His body was found on snow-covered ground, without snow-track evidence of anyone else nearby. A double-barrel, 20-gauge shotgun was found near the decedent. Autopsy revealed a contact shotgun entrance wound of the posterior midline neck, with a gaping exit wound of the left side of the face. Measurements of the gun's trigger-to-barrel and the decedent's entrance wound-to-fingertips indicated that the man could have easily fired the shot. The cause of death was a shotgun wound of the neck/head. The manner of death was suicide.

Case 4: A 26-year-old man was found dead by police in his secured apartment, after the man's employer requested a welfare check. The decedent had called off from work, stating that he was "mentally unable to work." This statement raised concerns for his boss, as he knew that the man struggled with depression and suicidal thoughts. His body was found prone, on the floor, with his head turned toward the right, and his 9mm handgun clasped within his left hand, near the back of his head. At autopsy, a contact gunshot entrance wound was present on the midline occipital scalp. An exit wound was on the central right forehead, near the nasal bridge. The cause of death was a gunshot wound of the head. The manner of death was suicide.

Each case will be presented, with special attention given to investigative and autopsy findings which indicated suicide as the manner of death.

Forensic, Gunshot Wound, Posterior Head