OH SHOOT! AN ACCIDENTAL DISCHARGE OF A FIREARM CAUSING A POSTMORTEM GUNSHOT WOUND IN A SUICIDE

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INTRODUCTION

Postmortem injuries which occur at the time of scene investigation are rare and not well documented in the literature, with only some information published on blunt trauma wounds[1]. In contrast, postmortem gunshot wounds are seemingly unheard of or severely underreported.

We report the death of a 79-year-old male who was found deceased in his secured apartment on a welfare check approximately 4 hours after his brother received an email from the decedent describing the intent to commit suicide. Per family, the decedent remained isolated most of his life and "does not have anyone". The date of death held no particular significance, but the decedent expressed suicidal ideation in the past without a prior plan or attempt. The decedent was told at a recent doctor's visit that his nicotine dependence would impact his ability to walk and explained how this upset him to his brother.

SCENE DESCRIPTION

The decedent was found on the floor between a short hallway and his living room in a right lateral recumbent position. Rigor mortis was present and broken with minimal force. Liver mortis was present and fixed. During scene investigation, a handgun was discovered underneath his torso and held by his right hand (Figure 1). In approximately 25% of suicide cases in which a handgun is used, the handgun will be found in the hand [2,3].

Figure 1. Evidence marker #1 marks the presence of the decedent's semi-automatic AMT .380 9mm Backup gun positioned beneath the decedent's torso and still being held in the right hand.

Initially two gunshot defects were noted, one on the chest and one on the back. As a member of the crime scene unit moved the handgun, the trigger was inadvertently pressed and a single shot was fired. Subsequently, two new defects were noted on decedent's head and neck.

In a spare room, a manila folder containing notes for the landlord, advanced medical directives, and biblical references was found. In the bathroom, an apparent suicide letter was located with a 2017 prescription. Toxicology was negative for this select medication and other drugs of abuse.

GROSS EXAMINATION

At autopsy, the antemortem gunshot wound entered the anterior left chest which had a round defect with a circumferential black abrasion and surrounding soot consistent with a contact wound found often in suicide cases [2,4]. The wound path was markedly hemorrhagic and involved both lungs creating bilateral hemothoraces and periesophageal and periaortic hemorrhage before exiting through the right back (Figure 2A, 2B).

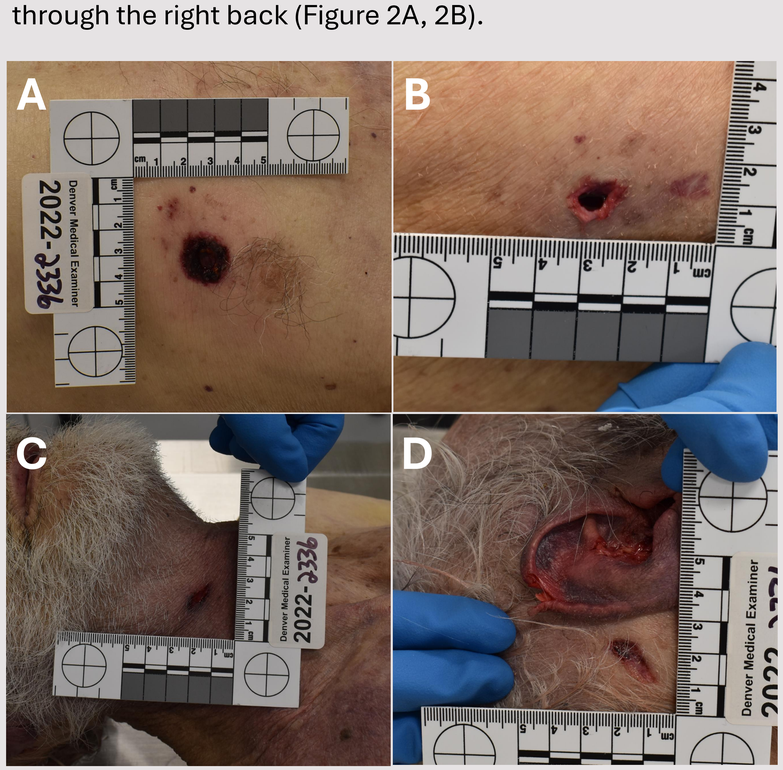

Figure 2. Entrance and exit wounds from antemortem (A, B) and postmortem wounds (C, D). Antemortem entrance wound of the left chest with soot (A). Antemortem exit wound of the right back (B). Postmortem entrance wound of the right neck without soot (C). Postmortem exit wound of the right ear (D).

In contrast, the postmortem gunshot wound entered the right side of the neck, did not have soot or stippling, and perforated the skin and soft tissues of the right side of the neck, fracturing the right side of the mandible before exiting out the right ear (Figure 2C, 2D). Of note, this postmortem gunshot wound showed less hemorrhage when compared to the antemortem gunshot wound. However, there was still a moderate amount of hemorrhage in the depths of the wound track in the upper cervical region (Figure 3).

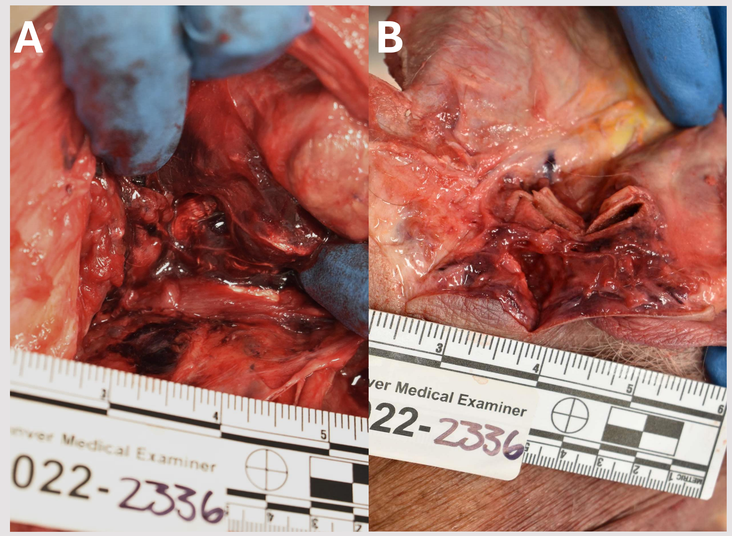

Figure 3. Internal examination of postmortem entrance and exit wounds. Dissection of entrance wound of the right neck with hemorrhage (A). Dissection of exit wound of the right ear with hemorrhage (B).

CONCLUSIONS

The presence of hemorrhage into the tissues is one means of grossly distinguishing antemortem from postmortem wounds[1]; however, the congestion related to positioning of the body may result in slightly more hemorrhage than expected, as seen in this case.

An entrance wound to the chest occurs in 13.2% of suicides using a handgun, compared to 2.4% under the chin[3]. If not for the known inadvertent discharge of the weapon at the crime scene, it could have been difficult to accurately report on the injuries sustained. Suicides with multiple gunshot wounds are uncommon, but not rare[3]. Yet, if more than one wound pathway produces injuries that would be considered incapacitating, the evidence would strongly argue against suicide[5]. The importance of knowledge about all events during scene investigation and safe handling of weapons at the scene, cannot be overemphasized.

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