



## Pathology Biology Section – 2007

### G40 Snake-Shot From a Handgun: An Unusual Gunshot Wound Suicide

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After attending this presentation, attendees will learn about projectiles for handguns that fire snake-shot and the use of such a projectile in this case of suicide and be able to recognize the following: How snake-shot can be fired from a handgun, how such a projectile can create an unusual entrance wound on postmortem examination, how to reconcile radiologic findings typical of a shotgun with a handgun as the weapon, and why such findings are not inconsistent with a suicide.

This presentation will impact the forensic community and/or humanity by providing useful information about unusual but not uncommon ammunition used in a suicide.

A 49-year-old man had an argument with his wife at his home. He got a revolver out of his locked gun cabinet, went out to his car, and was found dead in the car some time later with a gunshot wound. Scene investigation found the revolver in the deceased man's hand. There was no shotgun present in the house or the car. A suicide note to the son was located in the house.

Initially, the location of the gunshot wound made this suspicious for a homicide. He was shot behind the right ear. Autopsy procedures included photography, gunshot residue, X-Ray, toxicology, and visceral dissection. The X-Ray of the decedent's head showed unusually extensive fracturing of the cranium and numerous pellets in the cranial cavity.

Close examination of the gunshot wound revealed a hard contact, stellate, penetrating wound of the head, of unusual dimension for a handgun, located above and behind the right ear. A muzzle mark was difficult to distinguish because of the numerous stellate tears radiating from the entrance perforation. The parietal bone of the skull had a perforation with fouling beneath the periosteum. The right parietal and occipital lobes were perforated by multiple pellets, partially dividing the midbrain from the cerebral hemispheres. The pellets also perforated the left cerebral hemisphere, pulpifying the brain parenchyma.

These pellets on X-Ray and direct examination were consistent with snake-shot. This ammunition is most frequently used in shotguns. When it is fired from a handgun, it is typically used to kill reptiles and other thin-skinned small animals at short distances, up to approximately five yards. Handguns of many calibers including 9 mm, .357 Magnum, .38 Special, .40, .44 Special and Magnum, and .45 semi-automatic may accept small pellet-filled projectiles which contain shot of the same size as that used in a shotgun, but with a smaller load and charge.

The rounds consist of a hollow plastic projectile that contains the loose shot. If snake-shot is used in a gun without the encapsulating plastic, the lead shot may form pits in the rifling of the barrel. The cartridge moves down the barrel of the handgun and opens on leaving the muzzle; normally, the shot does not separate until after it has left the barrel. With shot of size #12, colloquially known as snake-shot, there might be as little as 1.5 to 3 ft-lb of energy in each pellet as it hits the target. While it might easily penetrate human skin at close ranges (but not contact), it would not be expected to penetrate deeper into the body than muscle tissue, and so would not be typically used in a homicide. Some experts report that the rounds are not useful for self-defense, especially against a human assailant, as the penetration is minimal and the shot diameter tiny. However, in the case of a direct hard contact gunshot wound this ammunition created a surprising amount of damage that was more than sufficient to kill.

The cause of death in this case was a hard contact gunshot wound of the head. The manner of death was suicide, based on the autopsy and scene investigation. The use of snake-shot as ammunition was unusual but just as lethal as a bullet.

**Snake-Shot, Handgun, Suicide**