CASE REPORT

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Handgun Pellet Ammunition ("Snake Shot") Wounds: Report of Three Cases

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ABSTRACT: Wounds produced with handgun pellet ammunition (snake shot) are described for three homicides. In two of the cases, there are other significant injuries.

KEYWORDS: pathology, ballistics, death

Handgun cartridges loaded with pellets are now available in various calibers, including .22, .38, and .44, from various manufacturers. The pellets do not penetrate well when fired from a distance, but fatalities resulting from contact or close shots have been reported. Many of those cases are suicides [1]. While reports of homicides solely from wounds produced by handgun pellet ammunition are rare [2], numerous reports of homicidal deaths mention wounds of this nature found in association with other wounds [3].

Three additional homicides are described in this report.

Report of Cases

Case 1

A 64-year-old white male was discovered fully clad and lying prone on his bed. There was no evidence of robbery. A ligature was tied around the neck. There were three wounds of the left temporal region, which were originally interpreted as contact bullet wounds. The wounds ranged in diameter from 5 to 7 mm (roughly $\frac{1}{4}$ to $\frac{3}{8}$ in.), with abundant powder in the depths of the wounds (Fig. 1). X-ray examination revealed many pellets within the head (Fig. 2). Inspection of the skull showed an irregular defect in the temporal bone, measuring 25 by 10 mm (1 by $\frac{3}{8}$ in.). Large areas of the left and right cerebral hemispheres were disrupted. Many tiny pellets (dust) and multiple layers of brown fiber wadding material of small caliber (Fig. 3) were recovered from both regions. In addition to the pellet injuries of the head and brain, autopsy revealed hemorrhage within the muscles of the neck and a frac-

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FIG. 1-Case 1: three contact wounds of the left temporal region. Note the ligature mark on the neck.

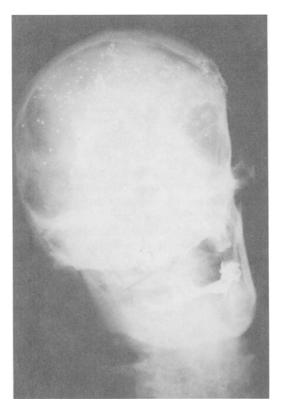


FIG. 2-Case 1: X-ray of the head showing many small pellets.

ture of the sternum. Death was attributed to a combination of pellet wounds of the brain, strangulation, and blunt force injury.

Case 2

A 21-year-old Hispanic male was found inside a cardboard box. There was a piece of torn sheet tied tightly around the neck and another piece of sheet and a piece of cord tied around

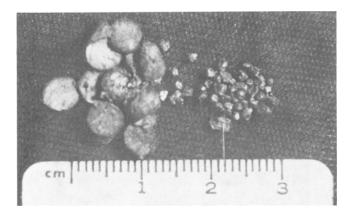


FIG. 3-Case 1: pellets and wadding material removed from the brain.

the ankles. One white plastic disklike wad consistent with a large-caliber handgun (probably .38 caliber) was found resting on the decedent's chest.

There were two pellet wounds of the face. One was located at the superior lateral border of the right orbit and consisted of a central defect measuring about 15 by 10 mm ($\frac{5}{8}$ by $\frac{3}{8}$ in.), with scalloped edges and many surrounding individual pellet entrances. The entire pattern measured about 50 by 40 mm ($\frac{15}{8}$ by 2 in.). The second wound was located on the nose and consisted of a scalloped central defect, measuring about 20 by 10 mm ($\frac{7}{8}$ by $\frac{3}{8}$ in.), surrounded by individual pellet entrances. The entire pattern measured 80 by 55 mm ($\frac{3}{8}$ by $\frac{21}{4}$ in.) (Fig. 4). No powder was present near either wound. X-ray examination showed many pellets within the tissues (Fig. 5). Multiple #12 pellets were recovered from the eyes, nasal sinuses, and periorbital soft tissues. No wadding was recovered from the wounds.

There was a fracture of the roof of the right orbit, with an associated small subarachnoid hemorrhage of the inferior surface of the right frontal lobe. No other injuries were found at autopsy.

Case 3

A 29-year-old black male was shot to death on the street by a group of assailants. At autopsy a gunshot wound of the left occipital region of the head, with perforation of the left and right cerebral hemispheres, was found. A deformed .38-caliber copper-jacketed bullet was recovered. There were approximately 30 pellet entrances covering an area of about 75 by 150 mm (3 by 6 in.) on the right buttock (Fig. 6). Each pellet had traveled through the superficial layers of the skin in a right, upward direction. Although many #9 pellets were re-



FIG. 4—Case 2: two handgun pellet ammunition wounds of the face, each consisting of a central defect surrounded by individual pellet entrances.



FIG. 5-Case 2: X-ray of the head showing pellets.



FIG. 6—Case 3: many pellet wounds of the right buttock. A bullet wound is visible near the pellet wounds.

covered, no wadding was found. Two bullet entrances were noted on the right buttock and on the posterior aspect of the right thigh. Both bullets had traveled in a right, upward direction, parallel to the paths of the pellets, and exited from the body. In addition, a grazing wound of the abdomen and an "in-and-out" bullet wound of the anterior aspect of the left thigh were noted.

Discussion

Neither weapons nor cartridges were found at the scenes of the three homicides; thus, experimental firings were not possible. However, the wounds are quite similar to others reported in the literature [1-3]. Deep penetration of the pellets was noted only in the case involving contact wounds.

The importance of distinguishing these wounds from shotgun wounds should be emphasized. Recovery of any wadding material present is essential. In addition, careful observation of associated bullet wounds with a similar trajectory (as noted in Case 3) can be very helpful.

References

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