CASE REPORT

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Postmortem Wound Dehiscence: A Medicolegal Masquerade

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ABSTRACT: Postmortem artifactual changes associated with decomposition have been well reported throughout the forensic literature. The recognition and correct interpretation of these artifactual changes are of paramount importance in determining if injuries were sustained before or after death. Presented is a case report of surgical wound dehiscence associated with bloating in the postmortem decomposition state. Previously undescribed in the current forensic science literature, this entity can present difficulties in interpretation. The artifact is described and the methods used in its identification are discussed.

KEYWORDS: pathology and biology, postmortem examinations, wound dehiscence

Postmortem decomposition can produce numerous artifactual changes that are described in the forensic science literature. Postmortem wound dehiscence resulting from bloating in the decomposition state is thought to represent a rare and unusual postmortem artifact. Lack of experience with this entity by local personnel as well as pathologists from other medical examiners' facilities in the United States prompts the reporting of this case.

Case History

In early November, personnel from the Hennepin County Medical Examiner's Office were summoned to view a body found in a run-down tenement building in central Minneapolis. The deceased, a known derelict and alcoholic, had been discovered in his first floor apartment by the landlord who had been investigating an increasing odor in the building. The scene was not unlike that of many other older tenements in the area, the building being in severe disrepair. The apartment, a single room with attached bath, was found in a state of general disarray, littered with empty wine bottles and papers. The body was ob-

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served lying on the floor at the foot of the bed in a prone position. Preliminary examination revealed an adult native American male dressed in appropriate daytime attire who had undergone a severe degree of postmortem decomposition, characterized by soft tissue putrefaction and abdominal bloating. The clothing was undisturbed; a buttoned shirt had been pushed up by the distending abdomen. On the exposed lower abdominal wall, a gaping linear wound was noted extending in a cephalad direction to the mid-epigastric region. Loops of bowel and mesentery protruded from the center of this wound (Fig. 1). There were no signs of additional trauma to the body (defense wounds, stab wounds, and so forth). A large pool of putrid, foul-smelling fluid permeated the carpeting beneath the body and precluded adequate estimation of blood loss.

A thorough search of the premises failed to reveal any weapons capable of inflicting such injury. The deceased's wallet was found open with its contents strewn about; no money or other valuables were present on the premises. Both of the windows to the apartment were without screens or locks, thereby affording easy entrance from an adjacent alley. The single door to the apartment had been found slightly ajar at the time the body was discovered. In view of the presentation of the body and the appearance of the scene, foul play was suspected, and the body was removed to the Hennepin County morgue for more thorough examination.

External examination of the wound site revealed sharp, well-defined edges consistent with an incision-type wound (Fig. 2, top). Following decompression of the abdomen and washing of the area, a 15-cm linear scar was observed running parallel to the upper margin of the wound in the immediately adjacent soft tissue (Fig. 2, bottom). Internal examination revealed knotted green surgical suture in the muscularis and the peritoneal layers of the wound. No evidence of hemorrhage at the adjacent soft tissue or destruction of the abdominal viscera was noted.



FIG. 1—Intestine spontaneously extruding from a linear defect in the abdominal wall that resembled an incised wound.



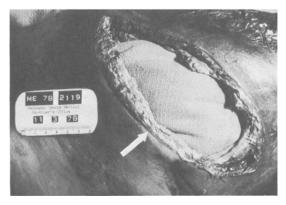


FIG. 2—Details of abdominal defect (top) in situ and (bottom) after resection from abdominal wall. Arrows point to an old surgical scar.

Subsequent review of the deceased's medical history revealed abdominal surgery in the area of dehiscence had been performed some months earlier.

Comment

To state that a decomposed body deserves a careful examination is axiomatic. The Hennepin County medical examiner insists that all decomposed bodies be removed to the county morgue where they can carefully be undressed and examined in an orderly, sequential fashion. Following this procedure ensures that all wounds will be noted and carefully examined. As this case illustrates, a cursory examination of the wound in question could have resulted in erroneously interpreting it as an antemortem cut or incision-type wound.

In a review of the current English literature as well as discussions of the case with personnel from medical examiners' offices around the United States, no occasion of old surgical wound dehiscence of the abdomen resulting from postmortem decomposition could be found. Reese [1] and Polson and Gee [2] do comment on the rupturing of body cavities during postmortem decomposition associated with gas accumulation. We believe this case represents the first report of dehiscence of an old surgical wound associated with postmortem decomposition in the English language forensic science literature.

References

- [1] Reese, J. J., Textbook of Medical Jurisprudence and Toxicology. 5th ed., Blakiston, Philadelphia, 1898, p. 51.
- [2] Polson, C. J. and Gee, D. J., The Essentials of Forensic Medicine, 3rd ed., Pergamon Press, Oxford, 1973, p. 25.

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