



### H26 An Autopsy Fingerprint Technique Using Fingerprint Powder

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After attending this presentation, attendees will: (1) understand that, in addition to traditional manual inked prints and digitally scanned prints, postmortem fingerprint records can be produced by the use of a method that employs fingerprint powder and adhesive address labels; and, (2) understand the technical aspects involved with employing the powder/adhesive label technique.

This presentation will impact the forensic science community by introducing a manual postmortem fingerprint technique that is simple, inexpensive, easy-to-perform, and offers several advantages over the traditional manual inked card technique.

Fingerprints are an important component of routine forensic autopsies and represent one of several potential methods for identifying a decedent. As such, fingerprints are typically retained as a part of the permanent autopsy record. Historically, fingerprints collected at autopsy involved a manual method using ink and cards.<sup>1</sup> Many offices continue to employ this method of fingerprint collection, as it is inexpensive and relatively easy to perform. Typical equipment required for taking manual inked prints at autopsy include an inking plate, a cardholder, printer's ink, a roller, a "coroner's spoon," and a fingerprint card.<sup>1</sup> Both flat and "rolled" prints can be made of the fingers, while flat palm prints are also sometimes created. Manually produced inked fingerprint cards can be photographed and/or digitally scanned or stored in "hardcopy" form. Some offices use fingerprint scanning machines, with the direct creation of digital prints.

A variety of challenges exist when attempting to take fingerprints from certain decedents. Decomposition, skin slippage, mummification, finger pad wrinkling due to water immersion, and trauma may cause great difficulty in obtaining suitable fingerprints at autopsy. Although the forensic literature provides recommendations regarding how best to overcome many of these challenges, the current study presents a simple method for obtaining high-quality finger, palm, and footprints at autopsy using fingerprint powder, a camel hair fingerprint brush, white adhesive address labels, and clear transparency sheets.<sup>2-4</sup> To employ this method, fingers and hands should be cleaned and dried, as a practitioner would do for traditional inking techniques. The skin surface of interest is lightly dusted with fingerprint powder, using the camel hair fingerprint brush. Next, the adhesive side of an address label is firmly applied to the powdered finger, followed by gentle removal. The adhesive side of the label, with adherent powder print, is then applied to the transparency sheet, thus preserving the powdered print, which is now visible through the opposite side of the clear plastic sheet. Similar techniques, with larger adhesive labels, are effective for obtaining palm and footprints. The technique is quick, easy-to-perform, and has the added benefit of allowing the adhesives to be labeled with pertinent autopsy information on the non-adhesive side. Additional benefits include a reduction in smudging (as is common with traditional inked prints), more easily obtained palm prints (as the adhesive sheets



## Pathology/Biology - 2017

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can more easily conform to the curved contours of the palms), and ease of filing, either via hardcopy storage or digital scanning.

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### Fingerprints, Autopsy, Identification