

H20 The “Tin Man”: Another Mafia Homicide

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Learning Overview: After attending this presentation, attendees will understand the importance of an accurate “investigation” to interpret Mafia-related crimes. The murders committed and/or commissioned by a criminal organization are characterized both by method used and positioning of the body with a characteristic admonitory significance.¹⁻³

Impact on the Forensic Science Community: This presentation will impact the forensic science community by serving as an updated attestation of how the Mafia has preserved its own homicidal modality in the past years; a complete explanation of this will be provided only by careful observation and analysis of present evidence.

A metal-sheet drum covered with branches was found in pine trees close to a metropolitan area in southern Italy. The drum contained a male corpse in a fetal position, covered with stones, soil, concrete, an empty red-colored plastic bottle of hydrochloric acid, and a small “free” rope of approximately 1 meter in length. There was no clothing except for a small piece of fabric around the neck and two dark-colored socks. No identifying features of the face were recognizable. The skin was grayish-black, friable, and inelastic.⁴ The hypostases were not visible, and the cadaveric rigidity was artefactual.

The autopsy showed a complex pattern of skeletal lesions, preliminarily demonstrated by total body Computed Tomography (CT) as follows: a fracture with multiple fragments of the lateral wall of the left orbit, disarticulation of the temporal process of the zygomatic bone, depressed, multiple fragment fractures of the left temporal bone, fracture of the lateral wall of the right orbit, and fracture of the maxillary bone with absence of some front teeth (incisors and canines). The mandible was disarticulated from the maxillofacial bones.

There was advanced liquefaction of the tissues of the neck: the head was connected to the trunk only through tendon and slender muscle-cutaneous flaps with dislocation of the anteroposterior axis of about 45° C5 on C4 and C7 on C6. The histological analysis showed some areas of subdural hemorrhage. The study of the other organs and viscera, despite the advanced liquefaction and putrefaction, excluded alternative causes of death.

The described injuries are due to blunt head and maxillofacial trauma. The morphology of the skeletal lesions, particularly in the left temporal region, is typical for the contusive nature of the fractures, produced with an object that probably did not have a large surface (stick, fist, stone, other). The left temporal region, the orbits, and the buccal region presented high-energy fractures caused by a force almost completely perpendicular to the surfaces. The site of the lesions suggests that the victim and the aggressor faced each other.

The analysis of molecular genetics, including the study of the polymorphisms of DNA extracted from the buccal swab of the two presumed sisters of a deceased subject and from the cadaver’s tooth, allowed this study to confirm the sharing of both parents with a probability equal to 99.99999999% (LR=4.21e + 15) with the consequent identification of the “tin-man.”

In conclusion, the case presented will demonstrate that these Mafia-style homicidal methods preserve a timeless symbolism representing a typical mark of belonging.

Reference(s):

1. Pomara C. et al. “Lupara Bianca” A Way to Hide Cadavers After Mafia Homicides. A Cemetery of Italian Mafia. A Case Study. *Leg Med* (Tokyo). 2015 May;17(3):192-7. doi: 10.1016/j.legalmed.2014.12.008. Epub 2014 Dec 30.
2. D’Errico S. et al. A Novel Macabre Ritual of the Italian Mafia (‘Ndrangheta): Covering Hands With Gloves and Burying the Corpse With Burnt Lime After Execution. *Am J Forensic Med Pathol*. 2011 Mar;32(1):44-6. doi: 10.1097/PAF.0b013e3181efbbf2.
3. De Donno A. et al. Manners of Killing and Rituals in Apulian Mafia Murders. *J Forensic Sci*. 2009 Jul;54(4):895-9. doi: 10.1111/j.1556-4029.2009.01068.x. Epub 2009 May 26.
4. Kozawa S. et al. An Autopsy Case of Chemical Burns by Hydrochloric Acid. *Leg Med* (Tokyo). 2009 Apr;11 Suppl 1:S535-7. doi: 10.1016/j.legalmed.2009.01.008. Epub 2009 Mar 6.

Tin Man, Mafia Murder, Genetic Investigation