A Semi-Permanent Solution: The Body Encased in Concrete

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INTRODUCTION

Human remains were found in a blue plastic barrel that had been discovered by the Gasconade River in Missouri. The remains were examined at the Boone/Callaway County Medical Examiner's Office. Traditional forensic analysis was hindered by the body being encased in concrete. Missouri Task Force One, a team experienced in removing persons from collapsed buildings with as little injury as possible, was utilized to recover the body from the concrete. The barrel was cut using a saw. The team then used rescue tools to expose the moderate-to-severely decomposed remains. All fragments were X-rayed and examined using a metal detector. A sample of brain tissue was submitted for toxicology.

FORENSIC ANTHROPOLOGY

Mark Beary was consulted, and he provided an anthropological analysis, as well as biological profile and description of the trauma. The biological profile indicated the remains belonged to a white male with a mean age of 45.6 years (SD 10.4 years)

The anthropologist determined the remains had been placed in the barrel following some degree of decomposition based on the presence of concrete found inside the pants and undergarments. Entomological evidence, supporting this conclusion, was present in fly puparia which had progressed through three larval instars before pupating.

The analyses revealed numerous points of trauma resulting from blunt force impact. The most significant impact was centered on the occipital bone, completely detaching the foramen magnum from the rest of the occipital bone. More fractures were present on the left maxilla, cervical vertebrate, and ribs. It was determined a minimum of three traumatic impacts were necessary to account for the trauma.

RECOVERY OF REMAINS

Figure 1A illustrates drilling into the concrete, a tactic utilized by Missouri Task Force One during the recovery of the body encased in concrete.
Figure 1B illustrates a portion of the remains recovered prior to examination by the forensic anthropologist.

EVIDENCE OF CAUSE OF DEATH

Figure 2A illustrates the posterior view of the cranium (inferior is up in the photo) showing a large region of blunt force impact and radiating fractures origination on the occipital bone.
Figure 2B illustrates the anterior view of the facial region showing the fracture of the left maxilla.
These injuries were determined to be consistent with peri-mortem blunt force injuries and were considered a cause of death.

POSTMORTEM ARTIFACT

The figure demonstrates a close-up view of sharp force trauma present on the left ulna, inferior to the coronoid process. This was determined to be postmortem artifact that occurred during extraction of the body from concrete.

CONCLUSIONS

The body was identified, in part, by a partial set of dentures with the decedent's name inscribed on them. The brain tissue submitted for toxicology was positive for amphetamine and THC. The decedent was identified as a 53-year-old-male that had last been seen alive one year prior. The decedent had moved to Missouri from another state. The individuals suspected of the homicide had been cashing his social security checks. The manner of death was classified as a homicide and the cause of death was consistent with blunt force injuries of the head.

This is an unusual case because the body was encased in concrete. The successful outcome of the case was reliant upon a collaborative effort between the Medical Examiner's Office, a forensic anthropologist, Missouri Task Force One, and law enforcement. There is no standardized method to approach a case where a body has been disposed of in concrete. We endeavor, by sharing this case, perhaps, to open discussions in approaches to these unique cases.