

## Pathology/Biology Section - 2013

## G75 Unusual Suicides Utilizing Chain Saws — Case Reports and Literature Review

Margaret A. Kaleuati, MS\*, Debra K. Kowal, MS, and Christopher B. Rogers, MD, County Dept of Coroner, 1104 N Mission Rd, Los Angeles, CA 90033; Michael T. Schmidt, DO, Cedars-Sinai Dept of Pathology and Laboratory Medicine, 8700 Beverly Blvd, Los Angeles, CA 90048; and Cynthia Bir, PhD, 818 W Hancock, Detroit, MI 48201

After attending this presentation, attendees will understand what can be observed in an unconventional suicide such as one committed with a chain saw.

This presentation will impact the forensic science community by better preparing those conducting death investigations for the analysis of unconventional death scenes and autopsy results to help identify the manner of death in these unusual cases.

Purposeful application of a chainsaw to the human form is a rare event; however, it has been reported in the literature more frequently in the past several years in cases of self-mutilation, suicide attempts, and postmortem dismemberments. In this presentation, the only two cases of suicide by chainsaw that have occurred in Los Angeles County will be reviewed. The findings of the investigation including the initial death scene examination, autopsy results, and subsequent analysis of tool marks in bones will be discussed. The mechanisms of suicide utilizing a chainsaw in these case reports will be examined and compared to other cases reported in the literature.

Case 1: A 49-year-old male was found dead on the floor of a motel room. He had been a resident of a board and care facility for the mentally impaired for over six years, but was not known to be under a physician's care for psychiatric issues at the time of his death. He had checked into the motel the day before for a one-night stay. He was lying supine between the foot of the bed and a dresser and the electric chainsaw was laying on the bed. Nearby on a table were the decedent's driver's license, suicide note, receipt for the chain saw dated the day prior and other personal items laid out in an orderly fashion.

Autopsy findings: A single wound approximately 2½ inches deep passing through the cervical vertebrae but not injuring the spinal cord extended from just posterior to the right ear inferiorly across the neck producing a wound approximately 7 inches long. The atlas (C1) vertebra revealed injuries compatible with the use of a large width cutting-edge instrument such as a chain saw, reinforced by the presence of chatter across the occipital bone.

Case 2: A 47-year-old female was found dead in her bedroom. She was considered disabled due to a brain injury but was not known to be under a physician's care for psychiatric issues. She was lying supine with her head at the foot of the bed. The electric chainsaw was present on the bed with the blade resting across the decedent's neck and her right hand still in the handle. The sheets she had covered the dressers with and the comforter on the bed were covered with blood spatter. A suicide note was taped to a wall of the bedroom.

**Autopsy findings:** There were two deep incised wounds, one of the anterior neck and one on the left shoulder. The wound of the neck measured approximately 6 inches long and extended from just inferior to the right submandibular angle to the left side of the neck and continued through to the posterior surface of the neck just left of the posterior cervical line. The wound to the left shoulder, which appeared to originate in the left shoulder articulation and terminate in the left clavicle, was approximately 2 inches in length. A study of the neck organs, cervical vertebrae, and clavicle revealed injuries compatible with the use of a large width cutting-edge instrument, such as a chain saw.

**Commonalities among the two cases included:** no history of suicide attempts or suicidal ideations, no defensive or hesitation wounds, and toxicological results indicating no drugs of abuse present at the time of death.

Suicides by chainsaw are rare but reported in the literature. There can be discrepancies between what is found at the death scene and autopsy of these unusual suicides and what is expected to be found in a conventional suicide. These cases were compared to the literature in consideration of the commonalities between the two cases and the differences that make each of these cases unique in comparison to the current literature. Chainsaw, Suicide, Forensic Pathology