



Pathology Biology Section – 2006

G83 Unusual Suicide With Chain Saw: A Case Report

Gilles Tourmel, MD*, Fabrice Dedouit, MD, Anne Becart-Robert, DDS, PhD, Nicolas Pety, MD, Valéry Hedouin, MD, PhD, and Didier Gosset, MD, PhD, Institut de Médecine Légale, Faculté de Médecine, 1, place de Verdun, Lille, 59000, France

After attending this presentation, attendees will learn the importance of a careful observation of the crime scene. This presentation will impact the forensic community and/or humanity by reminding the forensic pathologist that a careful analysis of both the death scene and the findings of the autopsy are essential in reaching the proper conclusion, especially in a very unusual death.

Only a few cases of suicide with a chain saw exist. The reports of these cases are never a complex system, such as presented in this case report. It is interesting to know of this type of a complex system.

A case of suicide using a chain saw is presented. A female suffering from schizophrenia committed suicide through an ingenious system leading to the sectioning of her upper cervical spine involving the cervical spinal cord. The findings of the resulting investigation are described and the mechanism of suicides with the use of a chainsaw is reviewed. The damages to organs and soft tissues are compared to the kinds of chainsaw used.

Case report: Death scene findings: A 32-year-old woman was found dead in her living room. The decedent was a female Asian engineer. She had a significant medical psychiatric past history. She was found dead by her family members ten days after her death. The head was disposed under a material of pulleys and bags filled with water bottles. The material and the appliance are detailed. The chain saw had a 1600 W, 220-240 V, 50-60 Hz engine, and weighted 3 kg. The length was 50 cm including the projecting rim of the chain. The chain's number of revolutions was 9.5 per second. The stains of blood were located on the floor without splatter on the walls.

Postmortem findings: The wound extended 7 cm deep into the neck and involved the posterior muscles and the posterior side of the third and fourth cervical vertebrae. A complete section of the spinal cord was noted. A study of the cervical bones was performed to compare with the characteristics of the chain saw and to explain all wounds on the cervical vertebrae. Bone injuries were compatible with the use of a large width cutting edge instrument consistent with known chain saw toolmarks. The edges were regular and no hesitation lesion was seen. Because the cadaver was decomposed, the dentist performed identification. The dental comparison of antemortem records and postmortem examination confirmed her identity.

Discussion: Suicides or suicidal attempts with saws are rare but sensational, due to the unusual patterns of injury and sometimes, because of the unusual death scene. Cases reports exist in the forensic literature of this type of suicide. The injuries are almost always inflicted to the head or the neck but in some cases are visceral, and tissue damage occurs because of strong vibrations of the chain saw applied directly to the body. In this case, the young female had significant psychiatric disorders, conceived, and completed a complicate scene of suicide. The wounds inflicted to the neck confirmed the observation of other authors.

The findings of the scene of death were very important to understand the mechanism of the additional material used in the complex manner. No typical hesitation injuries were observed in the neck, and these findings were compatible with the situation of the cadaver and the device. The dry bone study confirmed the regular and sharp limits of the bones injuries.

The authors discuss and compare this case to the literature in consideration of her occupation with possible cultural influences to explain the invention of this efficient and complex deadly system.

Initial autopsy study of the decomposed body were not sufficient enough to characterize the chain saw wounds on her neck, and therefore a dry bone analysis was important and subsequently performed in order to objectively study and understand the mechanism and the physiopathology of her death.

The presentation will illustrate the complex deadly system at her scene of death, in addition to the autopsy findings and the dry bone study.

Chain Saw, Suicide, Complex System