



D54 Lesional Aspects of Cranio Encephalic Injury Caused by an Ax: Two Cases

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After attending this presentation, attendees will have learned about cranio encephalic injuries as a result of ax wounds are not commonly reported in forensic literature.

This presentation will impact the forensic science community by describing the forensic investigations, autopsy, toxicological, and histopathological findings in case presentations. Additionally, forensic investigations, examination of the forensic pathologist, and the neurosurgical intervention are discussed, as well as the value of imaging for the justice in such situations will be presented.

Introduction: Cranio encephalic injuries as a result of ax wounds are not commonly reported in forensic literature. Just like machetes and swords, they are suitable for causing not only soft tissue wounds, but also deep slashes in the underlying bone. On the basis of two cases from Lille, in the northern France, fatal and survived injuries caused by ax are discussed.

Materials and methods: The forensic investigations of the crime scene and woman's autopsy findings are reported. Another living woman with important cranial lesions caused by an ax was examined by a forensic pathologist. The cranial lesions are described with important iconography.

Results: Case 1: A 50-year-old woman suffered two strokes from an ax in her home by her neighbor suffering from schizophrenia. The examination revealed a left fronto-parietal fracture and a right temporal wound with achieving the temporal scale and loss of bone substance. It also revealed a right superior frontal contusion, sub arachnoid hemorrhage, sub-dural hematoma, and an extra-dural hematoma of the vertex. Case 2: A 73-year-old woman was hospitalized four months in the aftermath of a stroke. She was back in her home for four days with a left hemiplegia. She was discovered in a wheelchair, dead with a skull fracture. An ax was found on the ground. Body's examination found numerous lesions on the scalp and right hand with suggestive defense lesions. At the autopsy, a cranial trauma and multiple areas of attrition was identified. The police investigation revealed that the fatal blow had been delivered by her husband, who had then committed suicide.

Discussion: Although an ax is potentially dangerous and widespread in the population, there is no legislation concerning. In forensic literature, the common sites of wounds were the head and the neck. Defense injuries are often associated. Homicide represents one of the leading causes of death, and the head is the target in the majority of cases. Most of the victims were predominantly male, contrary to this case report. The majority of the victims died instantly or within 24 hours. Blunt force is commonly used when the head is the target. Defense wounds, when present, are indicative of the homicidal nature of the attack. And multiple strokes present over the body indicate perpetrator's determination to end the life of the victim. Finally, the value of imaging for the justice in such situations is discussed.

Ax, Cranio Encephalic Injury, Hemorrhage