G40 Two Suicidal Deaths From Head Injuries Caused by Unusual Sharp Force Instruments and Review of the Literature

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After attending this presentation, attendees will become familiar with unusual penetrating sharp force wounds of the head, the external wounds and wound types produced, and internal wound trauma created.

This presentation will impact the forensic science community by reporting the first suicidal death by a meat thermometer to the head and by reviewing the literature of other sharp force penetrating suicidal wounds that have resulted in death.

Deaths due to sharp force penetrating wounds of the head are uncommon due to the thickness of the cranium and the difficulty of penetration to the brain. Even with brain penetration, individuals may survive with or without neurological deficits. These types of injuries are most often self-inflicted but homicide must be considered especially if the injury implementing instrument is no longer present in the wound.

Two unusual suicidal deaths due to penetrating head injuries will be presented. One case is that of a 44-year-old man who had previously served time in prison for second degree murder. He was at his residence when law enforcement officers arrived in order to arrest him on new molestation charges. They received no response after knocking at the door. Another resident arrived and entered the residence. The police remained outside of the dwelling. She found the man, unresponsive but still breathing, lying on the bed with a meat thermometer impaled into the right temple area of his head. Survival time was 26 hours but non-survivability was determined within the first few hours of the hospital stay following the CT scans. The thermometer was left in place until autopsy. Postmortem radiograph revealed the thermometer traversed the majority of the right side of the skull and brain. Autopsy revealed a 1/8" round puncture/stab wound on the right temple following removal of the thermometer. The right temporal lobe and basal forebrain were lacerated with massive hemorrhage of the basal forebrain with extension into the ventricular system. A laceration of a dural blood vessel, basilar subarachnoid hemorrhage, focal epidural hemorrhage, and cerebral edema at the entrance defect were also noted. Postmortem toxicology for ethanol and drugs was negative.

The second case was that of a 47-year-old man with a history of schizophrenia. He had been to many doctors in the past trying to "get the wires out of his head." After a request was made by his parents for a welfare check, police found him in his secure residence in his bathtub filled halfway with water mixed with blood. The shower curtain was pulled from the wall and located partially beneath the decedent. On the sink was a plugged in electrical drill with an attached 1-1/2" hole saw drill bit with skin and hair in the teeth. On the top of the head was a roughly circular scalp defect and underlying 1-1/2" circular skull injury with central 1/4" drill hole. Blood spatter on the walls indicated the decedent likely stood in front of the mirror at the sink while inserting the drill into his head and prior to collapsing into the tub. Drug paraphernalia was present at the scene and postmortem toxicology was positive for morphine.

In addition to these cases, a review of the literature will evaluate other unusual cases of penetrating injury of the head with special focus on the regions of the brain and skull injured and the survivability of the injuries.

Heat Thermometer, Electric Drill, Suicide

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