



Pathology Biology Section – 2011

G65 Decubitus Ulcers and Ligature Marks as Evidence in a Homicide Case

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After attending this presentation, attendees will better understand the application of medicolegal investigation, specifically the role of forensic pathologist during homicide investigation. In addition, attendees will become familiar with the relatively rare injury patterns in forensic practice.

This presentation will impact the forensic science community by providing knowledge to medicolegal investigators, especially in deciding cause and manner of death in equivocal death investigations. This presentation will increase the competence of the medicolegal examiners and forensic pathologists in examination of complicated cases, when the autopsy findings may become unique evidence in the following legal action and adjudication.

The 30-year-old woman was found dead in the house where she was living with her fiancée and her mother-in-law. At initial inspection, bad condition and exhaustion of the body suggested natural death by malignant disease with no preview of medical history. Some unusual circumstances aroused suspicion. The victim was isolated in the dark room with no possibility to call for help, because her private cell phone

was taken away. Crime police found adhesive tapes and linen strap near the bed. Insensitive behavior of the household aroused suspicion and demanded careful pursuit of the following medicolegal investigation.

External examination of the body revealed three different types of injuries: decubitus ulcers (pressure sores), scabs (as ligature marks), and bruises of various ages. The decubitus ulcers stage II and III of the coccyx-sacrum region and on the both sides of the buttocks, ulcers stage II of the left elbow and the left ankle, ulcers stage I of the left trochanter and over the pectoral spine near the left shoulder blade were described. The circular scabs around the neck, and both wrists indicated ligature marks, so as the necrosis of the II-III fingers on the left hand. The bruises of various colors were presented on the left hand and upper arm, as well as along both medial femoral regions. The autopsy findings showed that the sacro-coccygeal ulcers extended into the subcutaneous tissue and secondary resulted in bronchopneumonia with purulent effusion into the left thoracic cavity. The lipofuscin pigmentation of hepatocytes and myocytes as histopathological changes indicated a state of long time deprivation of food. The forensic pathologist pronounced the cause of death violent death by bronchopneumonia caused by infected decubitus ulcers.

It is believed that no similar cases described in the recent literature have been found. Homicide of a young woman by the infliction of decubitus ulcers caused by immobility and fixation of the victim's body with ligature (tapes and strap) including elements of social and physical separation combined with starvation has not yet been described in the criminal records in Croatia.

The forensic psychiatry expert determined the specific relations between the victim and the perpetrators. This study concluded that the perpetrators didn't act alone. The male perpetrator was a drug addict who had permanent schizotypal disorder of personality, with characterization of egocentrism, latent aggression, lower tolerance threshold and emotional coldness. His mother was a person with dominantly narcissistic and dissocial personality disorder, with an intention to control the life of her son. The victim was a person with predominantly passive-dependent personality disorder, psychologically and socially predetermined to victimization. Forensic psychiatrist concluded that the perpetrators planned the crime together, carried on by the motive of jealousy.

According to Croatian Penal Code the perpetrators of a criminal offence were convicted of intentional murder to 30 years imprisonment.

The case presented shows the importance of a detailed crime investigation and close cooperation between crime police and forensic pathologist, especially if the presumed course of events is ambiguous. Recognition of the relatively rare injury patterns and understanding the mechanism of death seems to be the most important factor in elucidation of the presented homicide case.

Decubitus Ulcers, Ligature, Homicide