



Pathology Biology Section – 2011

G73 Complex Suicide: An Unusual Case With Six Methods Applied

Stojan Petkovic, PhD, Miljen Maletin, MD, MSc, and Maja Durendic- Brenesel, PhD, Klinicki Centar Vojvodine, Department of Forensic Medicine, Clinical Center of Vojvodina, Hajduk Veljkova 5-7, Novi Sad, 21000, SERBIA AND MONTENEGRO*

After attending this presentation, attendees will be acquainted with complex suicide, potential methods applied, determination of main- dominant cause of death, and will be provided with more details about traumatic brain injury caused by screwdriver.

This presentation will impact the forensic science community describing six methods in committing complex suicide that should be of great interest in common forensic practice.

Complex suicides are committed by using more than one method. They account for 1.5% to 5% of all suicides. Depending on the time delay between the employed suicidal mechanisms they can be defined as “primary complex suicides” if the mechanisms are applied simultaneously and “secondary complex suicides” if the mechanisms are applied in quick chronological sequence.

The report presents a case of complex suicide of a 44-year-old male, found dead in the vicinity of his car, in a deserted frozen field few kilometers away from the nearest town. The doors of the car were opened, and victim's head and clothes were soaked in blood. Blood spots were found on both front car seats. Neither weapons nor any tools were found around his body outside the car. A farewell letter was hand- written on two sheets of paper and was found on the dashboard of the car. The motive for committing suicide was not given in this letter. On the right front car seat there were blood spots, a screwdriver handle, an automobile crane, one razor blade, one cell phone, car keys, a pencil, and a woolen hat. In front of this seat there were two half-emptied red plastic bottles with hydrochloric acid, and one almost empty transparent plastic bottle with traces of liquid of unknown origin. A single receipt from the nearby town supermarket was found in the car. One screwdriver, pack of razor blades, and two bottles of concentrated hydrochloric acid were listed in the receipt. Police investigation excluded homicide and no medical data confirmed mental illnesses.

The autopsy revealed wrist cuts, neck cuts, acid burns in the GI tract, multiple stab wounds to the head by screwdriver, and several uncertain signs of hypothermia. In the parietal region, along the midline, there was an epidural hematoma measuring 5x1 cm in diameter. The brain was swollen, with flattened gyri and narrowed sulci, measuring

1.64 kg. Marked indentations on the ventral surface of cerebellum, indicating tonsillar herniation were found. The brain tissue along all wound tracts was destructed, but there were no diffuse injuries in white matter, nor were concentric zones of necrosis around the tracts noticed. Toxicology analysis (GC-MS) of gastric and intestinal content revealed Cypermethrin (synthetic pyrethroid used as an insecticide in commercial agricultural applications), while analysis of blood, urine and bile was negative. The same substance was identified in liquid from transparent plastic bottle, taken from the scene.

The stab wounds to the head were determined to be the cause of death, while external hemorrhage and hypothermia were contributing factors. This is the first case of complex suicide reviewed in literature where six suicide methods were applied. This particular case is interesting because the victim used a screwdriver as a tool for inflicting stab wounds to the head, which is a rare suicidal method.

Complex Suicide, Traumatic Brain Injury, Screwdriver