



D70 The Contribution of the Clothing Analysis in Determining Cause and Manner of Death in Two Cases of Political Executions in Chile

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After attending this presentation, attendees will understand the value of the clothing analysis as support to establish the cause and manner of death in human rights violations cases.

This presentation will impact the forensic science community by showing the analysis applied produced relevant results 38 years after the event.

In September 1973 three people were executed in a northern city of Chile by state agents under conditions of political repression that prevailed in the country. The two males, who are the focus of this presentation, were university students. Once executed, the bodies were taken to a cemetery where there was allegedly performed an external examination, recognized by relatives and friends, and buried in the same cemetery in a perpetual niche.

On August 25, 2010, upon a court order, these three victims were exhumed and subsequently transferred to the Unidad Especial de Identificación Forense of the Servicio Médico Legal in Santiago, to determine the cause and manner of death. In the historical context of that time, these executions were justified as a result of the detainees escaping (Escape Act); although this was not consistent with the circumstances.

The expert analysis performed included the analysis of clothing, which purpose was to help in the determination of the cause and manner of death. The three bodies were dressed, and had to be undressed in the laboratory of the Unit. This presentation discusses only the analysis of the two male victims, as the third one, female, showed no peri-mortem alteration of forensic interest in her clothing.

In the analysis of the clothes, the macro morphological characteristics were taken into account to determine the type of garments and its historical context, as well as the individualization and characterization of the alterations that are directly related to the time of death.

The clothes had tears consistent with bullet holes, which matched-up with bone trauma of the same origin. The support of a chemist and a ballistic expert was requested to determine the trajectory and distance of the shot by applying the inductively coupled plasma-mass spectroscopy method to samples taken from the aforementioned tears, in search of metal particles present as gunshot residue, mainly Barium (Ba), Antimony (Sb), and Lead (Pb).

Despite 38 years having passed since the time-of-death, with the help of the clothing and chemical analyses, the judge had more scientific evidence to aid in the clarification of the facts, since the chemical results obtained show that in some tears the level of metal elements detected (Ba, Sb, and Pb), were consistent with short range shots with contact, typical of an execution.

This presentation shows the forensic impact that the clothing analysis can have as a supporting tool, in the determination of cause and manner of death in a human rights violation context, despite the time elapsed since the event.

Clothing Analysis, Cause of Death, Human Right Violations