



### **D63 The Associated Evidence Analysis and its Impact in Human Rights Violations Cases in Chile**

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After attending this presentation, attendees will understand the value of the associated evidence analysis as support to establish the cause and circumstances of death, which is of inestimable emotional significance for the family in human rights violations cases.

This presentation will impact the forensic science community by showing how the analysis applied produced relevant results after 38 years of the events. On the other hand, the recovery and reconstruction of the clothing and personal belongings of the victims is of inestimable emotional significance for the family.

The analysis of associated evidence is a process that was standardized after a 2007 finding in Litueche, Chile. More than 500 associated pieces of evidence were recovered, amongst which were small fragments of textile of different types, footwear, and personal items, among others. The judge of the investigation requested expert analyses that could provide the greatest possible detail about each piece of evidence in order to support the process of victim identification and the determination of the cause and circumstances of death.

The process consists of keeping the chain-of-custody, and documenting all of the expert analysis process through written, photographic, and sometimes video record. A qualitative (descriptive) and quantitative (measurement) analysis is carried out after recovering trace evidence (earth residues, study of stains, firing residues) and manual cleaning, taking care that the evidence is not damaged.

At the same time, the condition of the clothing and the recovered fragments is established; the color is determined through the use of a textile pantone; the type of fiber (natural or synthetic) and the type of fabric is also determined. The process continues with the reconstruction of textile fragments until rebuilding the clothing as much as possible has been completed, then continues with the determination of trauma, not related to taphonomic damage, such as the passage of a projectile.

Along with this, a judicial procedure for the recognition of associated evidence is usually performed with the participation of families linked to the case and the appearance of the judge.

Finally, the conclusions of the expert process are compared with ante-mortem information provided by the family and the judicial investigation.

This type of analysis can mean an important contribution to the inquest, given the peculiarity of some objects and articles of clothing and findings related to trauma in them, are useful information in determining the cause of death and the circumstances surrounding it.

In this sense, it is important to note that the consideration of the contribution of the associated evidence analysis depends on all of the elements of the investigation, its correlation with each other, the interpretation of the findings of each discipline and the integration of all information gathered.

On the other hand, the recovery and reconstruction of the clothing and personal belongings of the victims is of inestimable emotional significance for the family. Many times, the family can even restore a link with their beloved ones, when after a long time they see the woollens or garment that they may have made for, lent to, or helped choose for the victim while they were still alive.

**Associated Evidence Analysis, Human Rights Violations, Recognition Process**