



F31 The Albertani Case: Neuroscience and Criminal Trial in Italy

Michele Vaira, JD, V. le I Maggio 27, Foggia 71122, ITALY; and Laura Muscatello, MD*, Via L Spallanzani 9 Albinea, Reggio Emilia, ITALY*

After attending this presentation, attendees will better understand the scientific and judicial issues that have characterized the criminal trial held in Italy against Stefania Albertani, accused of the attempted murder of her parents and of murdering of her sister, Mariarosa Albertani. This presentation will explain how neuroscience — the set of scientifically conducted studies on the nervous system — can be used in the Italian trial system, with particular focus on the forensic use of the anatomic-genetic-clinical method and the possibility of cross-referencing heterogeneous clinical data.

This presentation will impact the forensic science community by highlighting the need to improve forensic science performance by using knowledge related to the brain, including behavioral genetics. The uniqueness lies in the utilization and enhancement of the anatomic-clinical method and the possible relationship between genetic alterations and legally relevant behavior — the study of the functioning of the normal and pathological mind through the correlation of data of a biological nature and data of a strictly psychological or behavioral nature. This is particularly relevant in the case as the trial judge, the gatekeeper of the judicial system, is faced with controversial conclusions from the defendant and the prosecution, which may affect his decision.

The Case: Stefania Albertani was accused of several crimes, including the murder of her sister, Mariarosa Albertani, (occurring between May 13-14, 2009) and the attempted murder of both of her parents.

From information acquired during the investigation, it emerged that Stefania Albertani, after having caused the financial disruption of the family business, killed her older sister, Mariarosa, after isolating her in the home and forcing her to take drugs for psychosis in doses such as to cause her death. She then set fire to the body.

Soon after the sister's disappearance, Stefania was arrested for an attack on her mother, during which she tried to strangle her mother with a belt. A complex criminal pattern emerged, and the accused was interrogated regarding the kidnapping and murder of her sister as well as suppression and destruction of the corpse and the attempted homicide of her parents.

The Capacity to Understand Right From Wrong: In January 2010, the defense argued that Stefania Albertani had acted under the influence of a psychotic pathological condition that had made her totally incapable of understanding right from wrong. In June 2010, the consultant of the Judge of Preliminary Investigations concluded that histrionic disturbances of personality and dissociative disturbances could not, in any way, affect the state of consciousness and the thoughts of the detainee, who at that time had to be considered a person capable of understanding right from wrong.

In September 2010, the defense obtained permission to complete the psychiatric investigations with additional tests. Newer and more thorough psychological assessments were arranged, including psychodiagnostic tests, neuropsychological examinations, cognitive neuroscientific tests, and behavioral genetics investigations. It was claimed that Stefania Albertani was partially capable of understanding right from wrong. The judge agreed with this appraisal and sentenced Stefania to 20 years of imprisonment, recognizing the presence of “alterations” in an “area of the brain that has the function” of regulating “aggressive actions” and, from a genetic point of view, factors “significantly associated with a higher risk of impulsive, aggressive, and violent behavior.” In addition to traditional psychiatric examinations, this decision was supported by more in-depth neuroscientific analysis that revealed the brain morphology and the inherited genetics of the accused.

This is, therefore, the first recognition in Italy, and among the first in the world, of the validity of neuroscience for the assessment of imputability.

Neuroscience, Criminal Trial, Murder