

## E60 Forensic Investigation in Suspected Cases of Infanticide — Two Case Reports in Portugal

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After attending this presentation, attendees will have: (1) learned about two infanticide cases that occurred in Portugal; (2) reviewed the *legis artis* regarding the forensic investigation of this particular type of homicide; and, (3) become aware of how the judicial system deals with this particular crime, hence contributing to its further characterization.

This presentation will impact the forensic science community by exposing the legal definition and forensic investigation procedures in cases of suspected infanticide in Portugal. The complex role of the forensic pathologist in such cases, in its multiple aspects, will be emphasized, namely the search for irrefutable evidence of a separate existence between mother and child, estimation of biological maturity, and differential diagnosis between death due to natural causes or to any act of omission or commission. The importance of a thorough forensic investigation, including death scene examination, analysis of circumstantial information concerning socioeconomic/clinical background of the suspected mother, and the need for ancillary histological, genetic, and toxicological analysis will be highlighted.

Two cases of suspected infanticide are reported, both referring to newborn infants, one male and the other female, whose births were apparently concealed by their mothers. One infant was found dead and disposed of in a plastic bag in the back of the supposed mother's car and the other infant was found in a residence's septic tank. Extensive forensic autopsies were performed, further complemented by forensic clinical evaluations of the suspected mothers. Full X-ray screenings were conducted prior to autopsy and all available organs were collected for ancillary histological examination. Blood samples, as well as liver, kidney, and stomach specimens, were obtained for toxicological analysis. Dried blood spot specimens were collected on filter paper for genetic investigation. In both cases, the autopsies revealed signs of decomposition, the presence of the umbilical cord, external morphological measurements and organ development compatible with full-term gestation fetuses, and the absence of congenital abnormalities.

The female fetus was found in a septic tank next to the alleged mother's residence, in a putrefied state, after an anonymous judicial complaint reporting a concealment of birth was made. Confronted by the accusation, the mother (a single young mother of low socioeconomic status) said the fetus was a stillbirth and confessed that she had tried to conceal the child in the septic tank. During autopsy, both macroscopic and histological appearances of the lungs exhibited no signs of a live and separated existence.

The male baby was found in the trunk of the supposed mother's car, a 40-year-old teacher. The mother confessed that she had been in labor in the bathroom and that the fetus was born in a cephalic presentation, falling into the toilet along with the placenta. The umbilical cord was allegedly cut with scissors. The woman also said that the fetus was stillborn, she did not ask for help, and she placed the baby inside a plastic bag in the trunk of her car. During

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autopsy, both macroscopic and histological appearances of the lungs demonstraited signs of a live and separated existence. Forensic evaluation detected recent delivery signs on the mother, who was convicted.

These casereports emphasize the importance of a thorough forensic investigation in cases of suspected infanticide, including a complete autopsy and, if possible, a physical examination of the alleged mother to seek signs of a recent pregnancy or childbirth, in order to help the legal system in the complex task of dealing with this particular crime.

Infanticide, Stillborn, Forensic Investigation

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