G35 Maternity and Paternity Testing of a Discarded Dead Neonate Involving a Young Girl and Her Father

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Upon completion of this presentation, participants will know how to gather evidence when the case involves a discarded dead neonate using DNA identification. In the presented case, the infant's mother was 16 years old and the infant's father was also the infant's mother's father. This is a rare paternity testing case. Sixteen Y-plex chromosomal STR testing was used to analyze the relationship of the girl's father and the infant.

This presentation will impact the forensic community and/or humanity by showing that Y-Plex STR is a very useful genetic maker for forensic practice.

A male neonate was found dead in a paper box, with the umbilical cord coarsely amputated. Next to the body there were several bloodstains on a pair of sandals marked with the name of a family living near the scene. A 16-year-old girl with the same family name was suspected as the neonate's mother, as her house was near the scene and blood was found in the toilette of her home. The girl's father and mother were divorced years ago, and her father was remarried to another woman. In order to obtain evidence to determine whether the infant was the girl's son and to establish the identity of the infant's father, DNA was extracted from the oral epithelium of the girl and her father. Blood taken at autopsy provided the source of DNA from the infant. Fifteen autosomal STR loci plus the amelogenin locus were investigated using DNA samples of the girl, her father, and the infant. To investigate the relationship between the infant and the girl's father, sixteen Y chromosomal STR loci were analyzed using DNA samples from the girl's father and the infant. The probabilities of maternity and paternity were 0.9999999 and 0.9999999, respectively, for all fifteen autosomal STR loci analyzed. Furthermore, the sixteen Y chromosomal STR loci were an exact match between the dead infant and the girl's father. These results conclusively proved that the 16-year-old girl and her father were the biological parents of the discarded dead neonate.

Discarded Dead Neonate, Maternity and Paternity Testing, STR

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