DNA PROFILING FROM AMNIOTIC FLUID: A NEW APPROACH FOR CRIMINAL PATERNITY

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DNA Identification is routinely performed in the Forensic DNA-Serology Laboratory of Puerto Rico for criminal paternity and human identification of decomposed bodies. We report the first case in the Caribbean for criminal paternity using amniotic fluid as a sample. Forensic DNA analyses from amniotic fluid were performed from a pregnant 10 year-old girl who alleged being raped by her stepfather. In order to proceed legally, a paternity determination is crucial to scientifically corroborate the victim's testimony. After the amniocentesis process, a Forensic Identification Protocol for isolation of DNA from the sample was performed. Amniocytes were extracted by organic extraction, concentrated by microcon, quantified, amplified by PCR, and typed by capillary electrophoresis, using the ABI 3100 Genetic Analyzer and fifteen STR genetic markers. A positive identification was reported with a Paternity Probability of 99.999%. In conclusion, amniotic fluid is a suitable for forensic paternity testing before the child is born.