Paternity identification in twins with different fathers caused by superfecondation
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Paternity tests enable to establish the biological relationship between a child and his alleged father. Today, this test is based on DNA fingerprinting using mainly short tandem repeats (STRs) markers. Indeed, each individual receives half of its genetic heritage from his biological mother and the other half from his biological father. Rare cases of twin pregnancy were induced by fertilization from two different parents. In this case, we speak about a rare and special obstetric situation “superfecundation”. This situation is exceptionally confirmed. We performed a genetic study of 4 members: a mother, her 2 twin infants, and a supposed father. This study involved the analysis of 15 STRs markers by “PowerPlex 16 System” kit. Genetic analyzes were performed under the same technical conditions and showed that one of the twins share the same alleles with the alleged father, while the other infant has different alleles in 11 of the 15 STRs studied. Therefore, despite that these two children are twins, their biological fathers are different.

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