

ABOUT A MUTATION DETECTED IN DNA FROM SPERM CELLS OF AN INDIVIDUAL INVOLVED IN A RAPE CASE

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In this poster, we report the case of a mutation detected in the DNA of an individual suspected to be the rapist of a young man.

DNA extracted from the sperm cells present on the anal swabs of the victim differ on one STR locus (vWA) from DNA extracted from the blood sample of the suspect. The vWA genotype of DNA extracted from the suspect blood sample is 15-16, whereas the DNA extracted from the sperm cells on the swab exhibits a third allele (allele 17).

A mixture between DNA from the epithelial cells of the victim and DNA from the sperm cells of the rapist was first excluded, as all other loci examined (total 17) showed no more than two alleles per locus.

We confirmed the hypothesis of a mutation by analyzing a sperm sample of the suspect: the third allele was really present.

Such mutations preferentially affecting germline cells have already been described (Jeffreys and coll., Gunn and coll.). The occurrence of that event is nevertheless quite rare so that a false exclusion of identity seems to be improbable.