



Blood as Forensic Evidence Helps in Solving Sexual Assault in POCSO Act Case-a Case Study

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Case Report

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Abstract

Blood is important evidence in many crimes like murder, rape, gang war etc. Blood and semen are mildly alkaline aqueous body fluid, which carries DNA. Every living thing has DNA, it's every composition differentiate you from others. The interesting fact is that although 99.99% of human DNA sequences are same in every person it is only 0.01 % of DNA that makes you unique. According to Locard Principle it is impossible for a criminal to act especially considering the identity of a crime without leaving traces of his presence, that means whenever someone enters or exist an environment, something physical is added to or removed from the scene.

In rape cases not only semen factor is important but also blood plays vital role in the forensic analysis. In some rape cases we observed that condoms are being used by accused, therefore in such cases it is quite impossible to get the analytical results of semen. Likewise in POCSO (protection of child from sexual offence.) rape cases analytical tests for semen resulted as negative as the victim passes out urine, in such rape cases "Blood" is the only important factor for analytical view. Sometime blood of victim is observed on clothes of accuse or vice versa. Analytical results of blood correlate the crime scene.

Keywords: Forensic Evidence; Murder; Rape; Gang War

Abbreviation: POCSO: Protection of Child from Sexual Offence.

Introduction

Nowadays cases of sexual offences are increased rapidly or extensively, in which 60 to 70 % cases are committed by known person (such as friends, family person or any known person in society) [1]. In this case study, an accuse is known by the victim and her family, rather he was having relation with victim. In our society when such crimes happens where accuse is known person or relative, crime was hidden by victim in pressure of family, friends and in fear of society.

Due to this reason accuse dare fearlessly or without feeling ashamed doing this crimes again and again [2].

To stop all these types of crimes, Indian Constitution has made various laws Under IPC code 376,363,354,377 and POCSO etc. which has been practiced all over to help the rape or sexual abuse victims.

Evolution of law enforcement has benefitted greatly from Forensic science. In this case victims family members decide to file a FIR against accuse hence under the POCSO and 376 act the complaint was logged.

Case Study

In Maharashtra state, Jalna District A 12 years old (minor) girl studied in 5th standard and an accuse is victim's cousin, who resides in neighborhood.

On 16th May 2020, at around 7: 30 AM victim went to common washroom. She didn't come back from bathroom till one and half hour, so her mother went to search her and called for her name loudly, listening to her mother's voice accuse came downstairs and ran away.

After a few moment victim came crying downstairs and when her mother asked her about matter, victim recited the whole incident (when she was on the way to her home, accuse grabbed her and forced to the terrace, where he sexually abuse her.) The victim's mother observed blood over her clothes. Then afterwards, victims parents logged FIR against accuse.

Police Findings

From the crime scene the investigation team collected cementations material along with clothes of both accuse and victim after their medical examination.

Analytical Findings

On primary analysis blood stains are detected on both victim as well as accused clothes and on cementations material. In secondary analysis revealed that blood stains on both clothes were of same person (accuse), for confirmation the blood stains from clothes and also stain from cementations material analyzed by DNA profiling [3-7].

Procedure-Absorption Elution Method

- Take clean and dry test tubes and mark them A, B and H.
- Cut the blood stains square or long threads in each test tube.
- Dip the fabric in anti-A serum, anti-B serum and anti-H serum respectively and keep at
- 40 C for overnight.
- Remove the antiserum and give 3 to 4 washings with ice chilled normal saline.
- After the last wash remove whole of the saline.
- Remove the threads and place it on cavity slides.
- Add one drop of 0.2 -0.5 % A, B and O indicator cells on the respective cavity slides.
- Centrifuge, shake and examine the contents for

agglutination microscopically [4].

Police Response /Discussion

Absolute matching the same blood group on clothes of victim and cementations material, (as per the information received from investigation officers that accuse was injured during victim was struggling.)

Conclusion

In sexual assault cases processing and analyzing forensic evidences in a timely manner is very critical for successful prosecution. Delays in testing make the use of forensic evidence impractical. The male DNA profile was observed from blood stains thus correlated the serological findings [5-8].

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