

THE IDENTIFICATION OF SEMEN STAIN THAT HAS BEEN TAKEN BY SCRAPPING FROM CONCRETE SURFACE: CASE REPORT

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ABSTRACT:

The identification of spermatozoids on the clothings of the victim, on the crime scene materials or on the anal- vaginal swabs that are sent for investigation of sexual assault events is very important for confirming the claim of sexual assault and for the determination of assailant. In a case study (in 2008) not only victim's anal- vaginal swabs and clothings but also material that has been mixed with soil on the concrete surface was collected by scrapping at the crime scene. At the end of the investigation no spermatozoids on the clothings and in the anal-vaginal swabs were found. But spermatozoids were found in soil mixed material and by using DNA analyzing method, identification was concord with the suspicious.

Key words: Sexual assault, semen stain, crime scene.

INTRODUCTION:

The identification of spermatozoids on anal and vaginal swab samples, victim's clothes or crime scene materials like bedspread, bed sheets etc. that were sent for investigation in sexual attack cases, is very important for confirming sexual attack claim and determining the criminal. Even if sexual attack is present; the sperm observation ratio in anal and vaginal swabs quietly decreases if the genital examination of the victim is delayed or if the victim goes to toilet before examination and/or has shower. In such cases, materials like clothes or bed sheets on which sperms are present become more important as an evidence. Therefore, we planned to report a 2008 year case to emphasize the importance of evidences collected from the crime scene.

MATERIAL METHOD:

Below, you can see the investigation results about victim's anal-vaginal swab samples, the stains on clothes and scrapping material (colour tests, microscopic examination) except the name of victim, suspect and the city where the crime has occurred (Table 1, Photo 1-2).

RESULT:

In one of our cases, anal-vaginal swabs of victim and soil mixed material that is collected by scrapping from concrete surface from the crime scene were sent to our laboratories. At the end of our examinations, we identified no spermatozoids either on the victim's clothings nor on anal-vaginal swabs. But, on the soil mixed material spermatozoids were observed and at the end of identification with DNA analysis using this sample, we determined that the sample belonged to the suspect.

Table 1: The examination results of victim's samples and material mixed with soil that has been sent from the crime scene.

Examined material	Stain number	Acid phosphatase	Spermatozoid
Anal swab	x	x	-
Vaginal swab	x	x	-
Pullover	2	-	-
Jogging suit	5	-	-
Panties	6	-	-
Scrapping material	1	+	+



Photo-1: Material mixed with soil

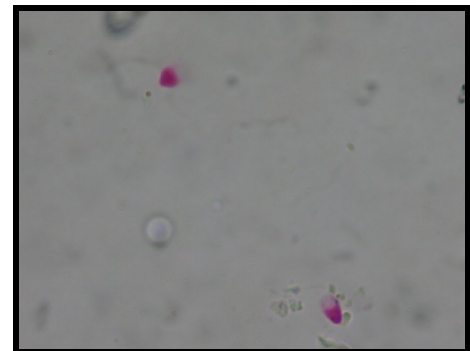


Photo-2: Spermatozoid image

DISCUSSION:

The importance and the effect of crime scene investigation is showed one more time by determining of identification was concord with the suspicious by DNA analyses from a stain in dust-soil environment that the biologic materials can more rapidly spoil and easily can contaminate.