

Persistence of DNA on Clothes Contaminated by Semen Stains after Washing

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Abstract : Sexual assault is usually a hidden crime where the only witnesses are the victim and the assailant. For a variety of reasons, even the victim may be unable to provide a detailed account of the assault or the identity of the perpetrator. Often the case history deteriorates into one person's word against another. With such limited initial information, the physical and biological evidence collected from the victim, from the crime scene, and from the suspect will play a pivotal role in the objective and scientific reconstruction of the events in question. The aim of work is to examine whether DNA profiles could be recovered from repeated washed clothes after contaminated by semen stains. Fresh semen about 1ml. (<1 h old) taken from donor was deposited on four types of clothes (cotton, silk, polyester, and jeans). Then leave to dry in room temperature and washed by washing machine at temperature (30°C-60°C) and by hand washing. Some items of clothing were washed once, some twice and others three times. DNA could be extracted from some of these samples even after multiple washing. This study demonstrates that complete DNA profiles can be obtained from washed semen stains on different types of clothes, even after many repeated washing. These results indicated that clothes of the victims must be examined even if they were washed many times.

Keywords : sexual assault, DNA, persistence, clothes

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