

Accepted Manuscript

Title: Repeatedly washed semen stains: optimal screening and sampling strategies for DNA analysis

Authors: Sarah Noël, Karine Lagacé, Sylvain Raymond, Dominic Granger, Magali Loyer, Sarah Bourgoin, Christine Jolicoeur, Diane Séguin



PII: S1872-4973(18)30215-1
DOI: <https://doi.org/10.1016/j.fsigen.2018.10.002>
Reference: FSIGEN 1974

To appear in: *Forensic Science International: Genetics*

Received date: 4-4-2018
Revised date: 1-10-2018
Accepted date: 1-10-2018

Please cite this article as: Noël S, Lagacé K, Raymond S, Granger D, Loyer M, Bourgoin S, Jolicoeur C, Séguin D, Repeatedly washed semen stains: optimal screening and sampling strategies for DNA analysis, *Forensic Science International: Genetics* (2018), <https://doi.org/10.1016/j.fsigen.2018.10.002>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Repeatedly washed semen stains: optimal screening and sampling strategies for DNA analysis

Sarah Noël^{1*}, sarah.noel@msp.gouv.qc.ca

Karine Lagacé¹, karine.lagace1@gmail.com

Sylvain Raymond¹, sylvain.raymond@msp.gouv.qc.ca

Dominic Granger¹, dominic.granger@msp.gouv.qc.ca

Magali Loyer¹, magali.loyer@msp.gouv.qc.ca

Sarah Bourgoin¹, sarah.bourgoin@msp.gouv.qc.ca

Christine Jolicoeur¹, christine.jolicoeur@msp.gouv.qc.ca

Diane Séguin¹, diane.seguin@msp.gouv.qc.ca

¹ Laboratoire de sciences judiciaires et de médecine légale, 1701 Parthenais, Montréal, Québec, Canada, H2K 3S7

*Corresponding author:

Address: Laboratoire de sciences judiciaires et de médecine légale, 1701 Parthenais, Montréal, Québec, Canada, H2K 3S7

Tel: +1 514-873-3301 #61480

Email: sarah.noel@msp.gouv.qc.ca

HIGHLIGHTS

- Exhibits in sexual assault cases are sometimes washed before being sent to the lab
- We tested semen stain detection methods on items washed multiple times
- We also tested different washing conditions (machines, detergents, bleach)
- ALS, PSA and microscopy are effective to detect semen stains on washed items
- A genetic profile was obtained from semen stains washed 6 times with bleach

Abstract

In many sexual assault cases, bedding and clothing are essential pieces of evidence that are screened for semen stains to gather DNA from the assailant. In some cases, these items have been washed before being seized and sent to the forensic lab. However, few data exist on the optimal methods for detecting and sampling semen stains on washed fabrics. In this paper, we used semen stains washed up to six times to evaluate the efficiency of commonly used screening

Download English Version:

<https://daneshyari.com/en/article/11008122>

Download Persian Version:

<https://daneshyari.com/article/11008122>

[Daneshyari.com](https://daneshyari.com)