Identification of prostate-specific antigen and spermatozoa from a mixture of semen and simulated gastric juice

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Abstract

The detection of prostate-specific antigen (PSA) and visualization of spermatozoa from forensic-type samples containing semen exposed to simulated gastric juice was investigated as a support for forensic practice. Samples of simulated gastric juice mixed with semen were prepared and incubated for up to 4 h at 37 degrees C. Samples were deposited on cotton cloth and on ceramic plates and allowed to dry. The samples were examined for the presence of PSA using the Seratec PSA Semiquant immunochromatographic membrane test. Microscope slides were prepared, stained, and analyzed for spermatozoa. Spermatozoa were detected in all samples, and PSA was detected on neat samples and on samples from the ceramic plate after incubation for up to 4 h. PSA was not detected in the samples deposited on cotton cloth at incubation times greater than 15 min. This may serve as a support for examinations performed when vomit or vomit-stained evidence is submitted for analysis.

Source

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