

Interactive Effects of the Carbon Paper, Sodium Bicarbonate and Oral Contraceptive Pills on Morphine Urine Test

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Abstract

Background and objectives: A major problem for labs. esp. medico legal centers is drug test false positive and negative results. Using carbon paper, sodium bicarbonate or oral contraceptive pills (OCP) are common among addict people to make the results negative. Therefore, we decided to evaluate the effect of carbon paper, sodium bicarbonate or OCP on morphine urine test.

Material and Methods: We performed this pre-experimental study on the urine samples of all people referred to narcotic drug laboratory of Markazi province during May of 2005. Of 2110 urine samples, the Morphine Rapid Test of 208 samples was positive. Then by means of TLC method, we confirmed the presence of morphine metabolites in 150 urine samples. After that, we divided these samples into three equal groups for adding carbon paper, sodium bicarbonate or OCP.

Results: The results show that in carbon paper group, 41 cases are positive and nine cases unclear. In sodium bicarbonate group, 45 samples are positive and 5 cases unclear. In estrogen conjugate group, all 50 samples are positive.

Conclusion: According to this study, adding carbon paper, sodium bicarbonate or oral contraceptive pills cannot make negative the Morphine Rapid Test result.

Key words: Morphine Rapid Test, Carbon paper, Sodium bicarbonate, Oral contraceptive pill.