



SWALLOWING MOUTHWASH - A NEW EXCUSE PHENOMENON FOR A POSITIVE BREATH TEST

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Introduction: Driving motor vehicles under the influence of alcohol is one of the serious violations of road traffic rules, as well as one of the frequent causes of traffic accidents. Drivers, whether in traffic accidents or random checks, in which the presence of alcohol (ethanol) in exhaled air is detected through a breath analyzer, often use as an excuse the use of mouthwash or food containing alcohol just before passing the breath test.

Purpose of research: The presented work aimed to verify in an experiment the influence of the use/ingestion of mouthwash containing ethanol by the examined person on the result of the breath test.

Material and methods: LISTERINE® TOTAL CARE® 6 in 1 BENEFITS mouthwash was used for the purposes of the experiment. Twelve healthy persons (9 men and 3 women) with an average age of 44.25 years and an average body mass index of 27.85 participated in the experiment. Breath tests were performed with a Dräger 7510 device from the Dräger company.

Results: After using 20 ml of mouthwash for 30 seconds, there was a decrease in the detected average values of ethanol by 71.3% between the 2nd and 5th minute and by 96.1% by the 10th minute, after using 30 ml of mouthwash for one minute between the 2nd and 5th minutes there was a decrease in the detected

average values of ethanol by 74.2% and by the 10th minute by 97.4%, and in both cases even after the subsequent ingestion of mouthwash there was a decrease in the detected average values between the 2nd and 5th minutes ethanol values by 83.3% and by the 10th minute by 100%. In the time interval of 15 minutes, all breath tests were negative.

Discussion: The results of breath tests can be influenced by several factors, which the advocacy uses to challenge their positive results. Questioning is based on three options: questioning the device, questioning based on the operator and questioning based on the person under investigation. He does not even avoid questioning the so-called conversion factor. Drivers' excuses for using Listerine mouthwash containing alcohol (ethanol) may ultimately affect the outcome of court proceedings if they do not comply with the rules for breathalyser performance. It is generally known that if the positivity of the breath test is caused only by the use of mouthwash containing alcohol, or food or food containing alcohol and not by consuming an alcoholic drink, a repeated test at a time interval of 15 minutes is negative.

Conclusion: Ingestion of mouthwash did not affect the results of breath tests. A necessary condition for the performance of breath tests is compliance with a 15-minute time interval before the performance of the first breath test in justified cases and also between repeated breath tests. In the event that the driver considers the result of the breath test to be false positive, he has the option of requesting a blood sample and its examination by the gas chromatography method.

Keywords: mouthwash, breath test

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