

FLUNITRAZEPAM – BENZODIAZEPINA WYKORZYSTYWANA W CELACH PRZESTĘPCZYCH. IDENTYFIKACJA METODĄ CHROMATOGRAFII GAZOWEJ ZE SPEKTROMETRIĄ MAS (GC/MS)

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FLUNITRAZEPAM – A DRUG USED FOR CRIMINAL PURPOSES. IDENTIFICATION IN URINE BY GC/MS

ABSTRACT – Conditions for separation and identification of flunitrazepam and its main metabolite 7-aminoflunitrazepam were developed, and applied to the analysis of urine obtained from a patient undergoing detoxification from opioid dependence, who was receiving methadone and clorazepate, as well as flunitrazepam for sleep disturbances. Aside from flunitrazepam and 7-aminoflunitrazepam, the urine was found to contain methadone and its metabolite EDDP, a metabolite of the drug called aminophenazone or metamizol, and nordiazepam (a metabolite of clorazepate). Nicotine and its three metabolites: nornicotine, 3-hydroxynicotine, and cotinine were also present, because the patient was a tobacco smoker.

Satisfactory separation of flunitrazepam and 7-aminoflunitrazepam was obtained after transformation of 7-aminoflunitrazepam into a pentafluoropropionate derivative.

The conditions used for urine extraction and for separation and identification of the urine extract components by gas chromatography with mass detection by electron ionisation (EI) allow to confirm the presence of flunitrazepam in cases of suspicions that it was administered for criminal purposes.

Key words: flunitrazepam, determination in urine.