Abstract

Using as background the ample literature on the use of “non-conventional matrices” in the toxicological testing for detection of drugs of abuse, not only for forensic purposes but also for other applications, the authors conducted an experimental study on subjects under treatment at the public Drug Addiction Service in Tuscany. The study presents the comparison of analytical results on the concentration of opium and cocaine derivates and metabolites in various keratinous matrices (head, pubic and armpit hair, nails) mainly collected from the same subjects. The study confirms many already established results in the related literature. However, the study ascertained other matrices (in the absence of the availability of hair) could well be used as an alternative test and, under certain circumstances, could give even better results.

Keywords: Drugs of abuse, Non conventional matrices, Forensic toxicology