

## Criminalistics Section - 2006

## B111 Quantitation of Amphetamines, Ketamines, and Opiates in Human Drug Hair by GC/MS

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Human hair subjects of chronic drug abuse (20-32 ages) in Taichung female prison were analyzed for morphine (MO), codeine (CO), 6-acetyl- morphine (6-AM), amphetamine (AM), methamphetamine (MA), 3,4-methylenedioxyamphetamine (MDA), 3,4-methylenedioxymethamphet- amine (MDMA), and 3,4-methylenedioxyethylamphetamine (MDEA) by GC/MS. Due to the determination of ketamine which has been abused as party drug is critical need, additional criminal cases were analyzed for simultaneous quantitation of AM, MA, MDA, MDMA, MDEA, Ketamine (KT) and Norketamine (NK). After wash procedure was performed, the extraction method included hydrolysis in alkaline or methanol depending on stability of drugs, following with solid-phase extraction or liquid-liquid extraction and derivatization. 6-acetylmorphine was determined in heroin addicts. AM and MA were all found but MDMA in methamphetamine abuse from Taichung prison cases, party drug MDA, MDMA, as well as ketamine and norketamine were simultaneously found in most of criminal cases.

Human Hair, Chronic Drug Abuse, Wash