

O-18 - TDM IN PATIENTS WITH SUBSTANCE RELATED DISORDERS

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The effect of pharmacotherapy of substance-related disorders is moderate at best. Therapeutic drug monitoring (TDM) could be an instrument to improve the outcomes. Since TDM for these drugs is not well established, the authors built a literature based rating scale to evaluate the necessity of TDM for the use of these pharmacological agents.

Methods: A literature research was performed for acamprosate, bupropion, buprenorphine, clomethiazole, disulfiram, methadone, naltrexone, and varenicline. A rating scale including 22 items, divided in five categories (efficacy, toxicity, pharmacokinetics, patient characteristics and cost effectiveness) was established for evaluation and related to the amount of evidenced based literature. For comparison, three reference substances with established TDM were similarly assessed: clozapine, lithium, and nortriptyline.

Results: The three reference substances, lithium, clozapine and nortriptyline, achieved scores of 12, 15 and 14 points, respectively. Methadone (17 points), bupropion (9 points), buprenorphine (11 points), disulfiram (10) and naltrexone (10 points in the indication opioid-dependency and 9 points in the indication alcohol dependency) achieved more than 30% of the reachable points, while acamprosate (7), clomethiazole (6), and varenicline (3) had fewer points especially in the main characteristics in favor of TDM.

These results suggest this rating scale is sensitive to the drug items pharmacokinetic, efficacy, toxicity and especially to patients characteristics scored by evidence based literature and is also sensitive to detect the appropriateness of TDM for drugs used in addiction treatment. The results will be discussed with respect to the new TDM - AGNP expert group recommendations of 2011.