

Methadone Poisonings in France: A Seven-Year Experience of the French Poison Control Center Network

Katharina von Fabeck¹, Romain Torrents^{1,2}, Mathieu Glaizal¹, Luc de Haro¹, Nicolas Simon

¹ Centre Antipoison et de Toxicovigilance, Service de Pharmacologie Clinique, Hôpital Sainte Marguerite, APHM, Marseille, France

² Aix-Marseille University, Marseille, France

Methadone is an opioid agonist prescribed in France for the treatment of opioid dependency. In order to evaluate the clinical toxicity of methadone, the authors present a seven-year experience of the French Poison Control Center (FPCC) Network at the national level. This study is a retrospective analysis of methadone exposures reported to the nine FPCC between October 15th 2010 and October 15th 2017. The two pharmaceutical forms (capsule and syrup) were considered. Childhood accidental poisonings were excluded (different study). 1415 cases of methadone poisoning were included (29% female, 71% male, average age 34 +/-10). 90% of the patients had history of addiction and 69% were treated with methadone (31% were naïve patients). The two main circumstances were addictions (47% of the cases) and suicide attempts (41%). In 45% of the cases it was capsules, in 35% syrup, unknown for 20%. The ingested methadone dose was significantly higher for suicide attempts (average dose 250 mg) than for addictions (average dose 140 mg). 126 deaths were observed representing 7% of the global deadly medicine poisonings observed during the studied period at the national level for the FPCC. Comparison of the addictions versus the suicide attempts emphasizes differences: female patients were more implicated in suicide attempts with ingestion of their own treatment, mainly capsules at home with association of benzodiazepines; while addictions concerned mainly males who ingested syrup, frequently associated with other narcotics, and with a higher morbidity and mortality (4 times more deadly evolutions with addictions than with suicide attempts).

Despite lower ingested quantities of methadone with addictions, this study observed higher morbidity and mortality in this circumstance versus suicide attempts. Many reasons can explain this result (high percentage of naïve patients during addictions, positive image of methadone in the addicted population). Undoubtedly,

methadone must be considered as a highly toxic medicine.

This investigation is a review examination of methadone exposures answered to the nine FPCC between October 15, 2010 and October 15, 2017. The two pharmaceutical structures (case and syrup) were thought of. Youth inadvertent poisonings were prohibited (diverse examination). 1415 instances of methadone harming were incorporated (29% female, 71% male, normal age 34 +/- 10). 90% of the patients had history of compulsion and 69% were treated with methadone (31% were gullible patients). The two primary conditions were addictions (47% of the cases) and self-destruction endeavors (41%). In 45% of the cases it was containers, in 35% syrup, obscure for 20%. The ingested methadone portion was essentially higher for self-destruction endeavors (normal portion 250 mg) than for addictions (normal portion 140 mg). 126 passing were watched speaking to 7% of the worldwide dangerous medication poisonings saw during the considered period at the national level for the FPCC. Examination of the addictions versus the self-destruction endeavors underscores contrasts: Female patients were increasingly involved in self destruction endeavors with ingestion of their own treatment, fundamentally cases at home with relationship of benzodiazepines; while addictions concerned for the most part guys who ingested syrup, often connected with different opiates, and with a higher grimness and mortality (multiple times more savage developments with addictions than with self-destruction endeavors). Regardless of lower ingested amounts of methadone with addictions, this examination watched higher grimness and mortality in this situation versus self-destruction endeavors. Numerous reasons can clarify this outcome (high level of guileless patients during addictions, positive picture of methadone in the dependent populace). Without a doubt, methadone must be considered as an exceptionally poisonous medication..