



Metformin overdose: A serious iatrogenic complication- Western France Poison Control Centre Data Analysis

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Mots-clés	clinical toxicology [6], Diabetes [7], metformin [8], overdose [9], poison control centre [10]
Résumé en anglais	<p>INTRODUCTION: The prevalence of type 2 diabetes (T2D) continues to rise across the world. Metformin is still considered the "gold standard" and is, therefore, increasingly prescribed. Monitoring of metformin continues to be debated because of its association with lactic acidosis (MALA), a rare but life-threatening complication. The aim of this study was to identify the main individual characteristics associated with severe poisoning in self-poisonings and therapeutic accidents reported at the Western France Poison Control Centre (PCC).</p> <p>METHODS: Retrospective study of metformin poisoning from September 1999 to September 2016 at the Western France PCC recorded in the French PCC's database (SICAP). The end-point was clinically high severity (mortality and/or cardiovascular shock and/or GCS \leq 7/15).</p> <p>RESULTS: Of the 382 cases included, 197 concerned acute accidental exposures, 127 self-poisonings and 58 therapeutic accidents. MALA concerned 63 patients: 44 therapeutic accidents and 19 self-poisonings. High severity concerned 59 patients: 47 therapeutic accidents and 12 self-poisonings. T2D and age > 60 significantly increase the risk of high severity (OR 7.7, CI [1.54-38.41]; P = 0.013; OR 3.5, CI [1.60-7.84]; P = 0.002, respectively).</p> <p>CONCLUSIONS: Metformin may lead to MALA and severe poisoning in therapeutic accidents but also in self-poisoning circumstances. Among reported cases, T2D history and age >60 increase the risk of serious poisoning. Monitoring of their treatment should be taken seriously especially in the event of digestive symptoms such as diarrhoea.</p>

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