

Characteristics and Outcomes of Unintentional and Intentional Acetaminophen (APAP) overdose in Thailand

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Background/Aims : Acetaminophen (APAP) is the leading cause of drug overdose and hepatotoxicity worldwide. Intentional APAP overdose (ITOD) ingestion typically follows suicidal attempt. However, some APAP hepatotoxicity cases may result from unintentional overdose (UNOD). This study was aimed to compare the clinical characteristics and outcomes of UNOD and ITOD in Thailand.

Method : In this retrospective analytic study, medical records of adults hospitalized with a diagnosis of APAP overdose at Rajavithi Hospital, Bangkok, between January 2013 and December 2017 were reviewed.

Results : A total of 184 patients with APAP overdose were included (17 UNOD and 167 ITOD). The median age was 22 (15-76) years and 79.9% were female. Clinical characteristics and outcomes are summarized in the Table. Overall, 14.7% developed mild hepatotoxicity (AST or ALT >3xULN), 6% developed severe hepatotoxicity (AST or ALT >10 xULN and INR >2.0) and 3 patients developed acute liver failure (1 spontaneously resolved and 2 deaths without liver transplant). When compared to ITOD, patients with UNOD were more likely to have older age, history of alcohol abuse, underlying cirrhosis, jaundice at presentation, and longer ingestion-to-hospital duration. Thus, patients with UNOD were more likely to develop renal injury, hepatotoxicity and liver failure.

Conclusion: UNOD accounts for about 10% of APAP overdose in Thailand. Patients with UNOD are associated with poorer outcomes which may partly explain by underlying chronic liver disease and late presentation to the hospital.