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65. A Comparative Study of Acetaminophen Exposures in ToxIC Registry with Texas Poison Center Data

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Background: Acetaminophen (APAP) exposures are common in toxicology. The data from these exposures have been traditionally registered in the National Poison Data System (NPDS). This database has been the main source of epidemiological information about toxicological problems. However, in 2010, the American College of Medical Toxicology (ACMT) created the Toxicologic Investigators Consortium (Toxic) in order to register cases seen by medical toxicologists (MT) at the bedside.

Study question: Do APAP cases reported in the Toxic registry have more serious clinical presentations than those in the NPDS?

Methods: This is a comparative study of demographic and clinical data of acetaminophen exposures in the Toxic registry with the Texas Poison Center Network (TPCN) database from January 1, 2010 to October 30, 2013. While not all of the data from the TPCN database are downloaded into NPDS, much is, and it thus reflects the total NPDS to a reasonable degree. The clinical information analyzed included all cases with hepatotoxicity, coagulopathy, acute kidney injury, liver function test abnormalities, hepatic necrosis, and hepatitis.

Results: In the Toxic registry, we identified 2,787 (11%) acetaminophen cases from 24,609 total exposures vs 44,241 acetaminophen cases (7 %) from 640,946 total exposures in TPCN database. Twenty-two percent of the acetaminophen cases in the Toxic registry had hepatotoxicity vs 2 % in the TPCN database. NAC was administered in 69 % of Toxic patients vs 17 % in TPCN. The table has other comparisons.

Discussion: Hepatotoxicity, coagulopathy, and acute renal injury were more commonly seen in Toxic registry than TPCN cases and NAC was more frequently given in the Toxic registry than TPCN database. A limitation is differences in coding between these two databases. Conclusion: APAP-exposed patients in the Toxic registry are more severely poisoned than those in the TPCN database.

Table (Abstract 65).

Database	Toxic(%)	TPCN(%)
Age 19–65 years	67	43
Female	66	58
Intentional ingestion	75	47
Coagulopathy	10	1
Acute kidney injury	7	0.7