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41. Poisoning During Pregnancy: Observations from the Toxicology Investigators Consortium (ToxIC) Case Registry

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Background: Poisonings during pregnancy are a particular health concern because they may have serious, life-long implications for the mother and fetus.

Study aim: This study aims to explore recent exposure trends in pregnant women in the USA.

Methods: We identified all cases involving poisoning during pregnancy that were catalogued in the 37 sites of the Toxicology Investigators Consortium (ToxIC) Case Registry of the American College of Medical Toxicology between January 1, 2010 and December 31, 2012. We recorded clinical data including volition, agents involved, management, and outcome.

Results: Of 17,529 poisoning cases reported to the ToxIC Registry, 103 (0.6 %) involved pregnant women. The most common type of encounter was deliberate self-overdose (54 %, with a pharmaceutical agent [46 %] and a nonpharmaceutical agent [8 %]), followed by unintentional pharmaceutical exposure (10 %), and withdrawal (9 %). The most common classes of agents consumed were non-opioid analgesics (31 %), sedativehypnotics/muscle relaxants (18 %), opioids (17 %), anticonvulsants (10 %), and antidepressants (10 %). Acetaminophen was ingested in 25 % of all cases. Thirty-seven percent of cases involved exposure to multiple drugs and 32 % involved exposure to more than one drug class. Seventy-nine patients (77 %) were symptomatic. Twenty-nine percent manifested a specific toxidrome, with sedative hypnotic being the most common (13 %), followed by toxidrome withdrawal (5 %), mostly from opioids. Central nervous system depression was present in 17 % of cases (71 % of whom involved sedative hypnotic/muscle relaxants). Tachycardia was present in 15 % of the cases; 6 % developed acetaminophen induced hepatotoxicity. The most common antidotes administered were N-acetylcysteine (20%), sodiumbicarbonate (9%), flumazenil (4%), and physostigmine (4 %). All six patients with carbon monoxide therapy underwent hyperbaric oxygen therapy. Twenty-three percent of women did not receive any treatment, despite the fact that 42 % of them were symptomatic.

Discussion: Most pregnant women presenting to hospital with acute poisoning were engaged in self-harm or suicidal behavior, and the majority were symptomatic. As roughly half of untreated pregnant women were symptomatic, prospective studies should explore whether pregnant patients are treated less aggressively than their nonpregnant counterparts and pregnancy outcomes.

Conclusion: Most acute poisoning cases in pregnant women are intentional (self-harm) and symptomatic.