Acute poisoning in pregnancy: experience of the Teratology Information Service of Bergamo, Italy

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Introduction: Poisoning in pregnancy is a rare reason for admission to emergency departments. The 2004 Toxic Exposure Surveillance System annual report indicated that of all poison exposures called into Poison Control Centers (PCC), only 0.5% occurred in pregnant women (Watson et al., 2005). Our Teratology Information Service (TIS) provides information on all aspects of the toxicity of drugs and chemical during pregnancy and lactation while the PCC's mission is to actively advance the health care by providing optimized toxicology-related patient care, information and education. We present our data related to pregnant patients with acute poisoning referred to our TIS and PCC, during the first 10 years of activity (2005 - 2014).

Results: During this 10 year period our TIS has provided fetal risk assessment for 110,594 pregnancies and breastfeed mothers; 62,552 acute intoxicated patients were referred to our PCC and 511 (0.80%) pregnant patients (16-49 years old) were involved.

Pharmaceutical and household products were the most common agents involved: 42% of patients were intoxicated with drugs and 20% with household products. Other categories concerning food poisoning (11.5%), industrial products (4.5%) and carbon monoxide (2.5%) were the most frequent. All other intoxications (snake and scorpion envenomation, plants ingestion, alcohol intoxication and toxic gas inhalation) involved 98 patients (19.5%).

Among poisonings with drugs, the CNS drugs were the most frequent category (30.5%); other drugs involved were: acetaminophen in 11 cases, misoprostol used as abortifacient in 9 cases and ferrous sulfate in 7 cases. About the household products, ingestion of caustic substances was the most common involving 34 cases (6.6%). Other agents were detergents, solvents, disinfectants, cosmetic products, household insecticides and other pesticides. Unintentional exposure was present in 333 cases (65%). In 178 patients with intentional exposure, 43 cases (8.5%) were for suicide attempt. The clinical status on arrival and during the medical observation was generally good. Serious symptoms occurred in 10 cases (2%).

Treatment was necessary for 149 patients (29%): activated charcoal was given in 56 women (11%) and gastric lavage was performed in 17 (3.3%) cases. Seventeen patients (13.1%) received antidotes: 8 cases of 100% oxygen by tight-fitting face mask, 6 cases of hyperbaric oxygen and in 3 patients intoxicated by acetaminophen, N-acetyl cysteine was administered.

Conclusions: The limited data collected over the last 10 years do not indicate the pregnancy outcome. Improved methods of follow up are needed to support management and provide advice to the pregnant poisoned patients.

References

Watson WA, Litovitz TL, Rodgers GC Jr, Klein-Schwartz W, Reid N, Youniss J, Flanagan A, Wruk KM. 2004 Annual report of the American Association of Poison Control Centers Toxic Exposure Surveillance System. Am J Emerg Med. 2005;23(5):589-666