Oral Abstracts

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CLINICAL OUTCOME OF PARAQUAT POISONING DURING PREGNANCY

SatariyaTrakulsrichai[1,2], BootsakornPaisanrodjanarat[1], CharuwanSriapha[2], AcharaTongpoo[2], WinaiWananukul[2]

[1] Emergency Department, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand 10400.
[2] Ramthibodi Poison Center, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand 10400.

Objectives: To analyze the clinical characteristics and outcome of paraquat poisoning in pregnant patients and fetuses.

Methods: We carried out a retrospective cohort study from Ramathibodi Poison Center Toxic Exposure Surveillance System, during a five-year period. The inclusion criteria were all pregnant cases who were exposed to paraquat.

Results: A total of 36 poisoning cases were included. Most were from the central (25%) and north regions (22.2%). All were oral exposure with the mean age of 22.7 years and mean gestational age of 23.1 weeks. The patients were in the 1st, 2nd, 3rd trimester for 9, 14 and 13 cases, respectively. Almost all cases ingested paraquat due to suicidal attempts. The median duration between the ingestion to hospital visit was about 2 hours (5 minutes-5 days). Most had gastrointestinal (GI) symptoms (77.8%) and corrosive effects (61.1%). The blood level and urine dithionite test were confirmed in 4 and 4 cases, respectively. Twelve patients (33.3%) developed systemic toxicity including acute kidney injury (AKI), abnormal liver enzyme and abnormal chest x-ray. Spontaneous abortion occurred in 2 cases, one case had the intrauterine fetal death and another one developed the uterine contraction. The medical treatment included intravenous dexamethasone (88.9%), cyclophosphamide (35.6%), vitamin-C (86.1%), N-acetylcysteine (5.6%) and oral vitamin-E (66.7%). Three patients received hemodialysis and four patients were intubated. The median length of hospital stay was 6 days (1-17 days).Nine cases delivered the babies during the hospital stay and four newborns were dead after deliveries. One dead newborn had the blood paraquat level of 19.8 at 9 hours, while the mother's blood level was 5.61 at 31 hours after the ingestion. The mortality rate of pregnant patients was 25%.One newborns died while the mother survived. The patients who survived and did not give the deliveries during the hospital stay, were followed up for outcomes of their babies. We performed the subgroup analysis between the dead and survived group. We found that AKI, abnormal liver enzyme and the maximum white blood cell level were statistically significantly different between 2 groups. While the age, trimester of pregnancy, duration between the ingestion to hospital visit, GI symptoms, corrosive effect, the medications and the length of stay showed no statistically significant difference.

Conclusions: Paraquat poisoning during pregnancy caused high fatalities for both pregnant women and their offspring. AKI was associated with the fatality. The result of this study would help guide the management of this poisoning.