OP-34

Digoxin Immune Fab treatment of cardioactive steroid poisoning in Taiwan: analysis of the data reported to the National Poison Control Center.

Hsiang-Ling Chen[1], Wanling Wong[1], Ming-Ling Wu[1], Jou-Fang Deng[1], Yu-Han Hung[1], Chen-Chang Yang[1]
[1]National Poison Control Center & Division of Clinical Toxicology & Occupational Medicine, Department of Medicine, Taipei Veterans General Hospital, Taipei, Taiwan

Objective: A national antidote network was established by the Taiwan Poison Control Center (PCC-Taiwan) in 2000. This study was conducted to better understand the appropriateness and effectiveness of digoxin immune Fab use in Taiwan.

Methods: Patients' data were collected from all patients treated with digoxin immune Fab (DIF) reported to PCC-Taiwan from 2002 to 2017. Data analyses were then conducted by stratifying on the pattern of poisoning (i.e., acute vs chronic poisoning).

Results: After excluding 1 patient with incomplete data, a total of 57 cases were eligible for final analysis. Among the 57 cases, 35% of them were male and 65% were female; 58% were >65 years old. The poisoning substance was mainly digoxin (80.7%), followed by toad (10.5%) and cardiac glycosides (8.8%). Fifteen (26%) and forty-eight (84%) out of the 57 cases conformed to the indication for DIF treatment recommended by the PCC-Taiwan and Micromedex Poisindex ®, respectively. Thirteen cases (23%) had a serum digoxin concentration >10 ng/ml, while sixteen cases (28%) had a serum concentration ranging between 5 and 10 ng/ml. There were 19 cases (33%) that presented with acute poisoning and 38 (67%) were of chronic poisoning. The average amount of antidote used in acute poisoning cases was 6 vials, while it was 1.8 vials in chronic poisoning cases. Nine acute poisoning cases (47%) completely recovered after receiving DIF and 25 chronic poisoning cases (66%) recovered after treatment. Among the 34 patients with full recovery, 91% of them were exposed to digoxin.

Conclusion: The response to DIF in chronic poisoning cases seemed to be better than with acute poisoning. Moreover, acute poisoning cases who were exposed to digoxin seemed to have a better response rate to DIF than patients with other cardioactive steroid poisonings.