ORAL PRESENTATIONS

[ID-O#067] Whether tachycardia and bradycardia predict development of atrio- ventricular blocks (AVB) in acute yellow oleander (*Cascabela thevetia*) poisoning?

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Objective: The objective of the study was to find whether development of bradycardia or tachycardia within the first 24 hours of admission following yellow oleander poisoning has a correlation with development of AVB.

Methods: A prospective cohort study was carried out at Teaching Hospital Batticaloa, Sri Lanka, from 1st July 2022 to 31st July 2023 among patients admitted following acute yellow oleander poisoning. The inclusion criteria were presence of any of the following signs: bradycardia (<60 bpm), systolic blood pressure < 80 mmHg nausea, vomiting, abdominal pain, diarrheoa. Patients were recruited within 2 hours of admission. Serial electrocardiograms were done at recruitment and every 4 hours for the 1st 24 hours following admission. Odds ratio (OR) was calculated to determine the likelihood of developing heart blocks in patients with bradycardia or tachycardia compared to those who are having normal heart rate (HR). Ethical clearance was granted by the Ethics Review Committee of the Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka.

Results: Two hundred consenting symptomatic patients were recruited. Of them, 64% (n=128) developed bradycardia and 17.5% (n=35) developed tachycardia. 6.0% (n=12), 8.0% (n=16) and 4.0% (n=8) patients developed 1st, 2nd and 3rd degree AVB respectively. Temporary cardiac pacing (TCP) was done in 8.0% (n=16) patients. 1.5% (n=3) died due to 3rd degree AVB. Case fertility rate was 8.33%. Patients who developed bradycardia had higher odds of developing AVB within 24 hours of admission compared to patients with normal HR (OR:2.6366, 95% CI: 0.8657 to 8.0301) and patients with tachycardia had lower odds of developing AVB compared to patients with normal HR (OR:0.2426, 95% CI: 0.0258 to 2.2863). The relative risk of development of AVB in bradycardia patients was 2.2402 (P = 0.1049).

Conclusion: Patients who developed bradycardia within 24 hours of admission following acute yellow oleander poisoning should be closely monitored for development of AVB.