RETROSPECTIVE DESCRIPTIVE STUDY ON CEREBERA MANGHAS POISONING IN EASTERN PROVINCE OF SRI LANKA: AN ANALYSIS OF ADMISSIONS AND OUTCOME IN A TERTIARY CARE HOSPITAL, BATTICALOA

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Objective: Self-poisoning with plant seeds or fruits is a common method of self- harm in South Asia. While most deaths follow ingestion of Thevetia peruviana (yellow oleander) seeds, other plants are locally common. We noted cases of self- poisoning with *Cerbera manghas* (CM) (sea mango, pink eyed cerbera, odollam tree) fruits in Eastern Province. Hence, we carried out a retrospective study to determine the clinico-epidemiology, treatment and outcome of patients with *Cerebera manghas* (CM) self poisoning in Batticaloa Teaching Hospital.

Methods: We reviewed the Bed Head Tickets of all patients and collected data on all cases with CM self poisoning admitted to Batticaloa Teaching Hospital, during the period 1st January 2011 to 31st May 2012 by using predesigned questionnaires, retrospectively.

Results: There were 24 patients [Mean age: 20 (±0.43) yrs], (Male: Female=16:8) with CM self poisoning. Sixteen (67%) of them were unmarried. The majority of patients were Tamils (20, 83%), but Muslims (4, 18%) were also involved. Thirteen (54%) of them had ingested half a seed. Most of the patients were symptomatic with classical symptoms of vomiting (24, 100%), dizziness (12, 50%) and abdominal pain (10, 42%) . Cardiac dysrhythmias such as bradycardia or an irregular pulse were the most common findings on examination. ECG findings showed 10 heart block (5, 21%), 20 heart block (Type I:II) (3,13%: 4,17%), Complete heart block (5,21%) and sinus bradycardia (4, 17%). A normal ECG was found only in 3 (13%) patients. Four (17%) of them had significantly higher serum potassium concentrations (6.0-6.9 mmol/L). Three patients had life threatening hyperkalaemia (>7.0 mmol/L). Eighteen (75%) of them had cardiac arrhythmia that required transfer to the Poisoning Unit for specialized management. Almost all patients were treated with multiple activated charcoals. Patients with bradyarrhythmias were treated with intravenous boluses of atropine and intravenous infusions of isoprenaline. Temporary cardiac pacing was inserted in three (13%) of them who had not responded to drug therapy. There were four deaths (17%), who had third-degree heart block and life threatening hyperkalaemia. They died before even definitive treatment could be instituted. Others had good recovery even though they had developed cardiac toxicity.

Conclusions: *Cerbera manghas* (CM) self poisoning was significantly common among young unmarried males in Batticaloa district of the Eastern Province. The risk of toxicity seems to have a negative correlation with number of seeds. Most patients had nonspecific symptoms. AV conduction defects are common. Multiple activated charcoals alone were safe and adequate in most cases. Patients presenting with features of severe toxicity has a greater risk of mortality.