

Role of activated charcoal in oleander poisoning

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Back ground: Deliberate self-poisoning with yellow oleander seeds is common in Tamilnadu. Oleander poisoning results in severe toxicity in the heart and has a death rate of about 10%. Specialized treatment (such as temporary pacemakers and the use of antibodies) is expensive and not available in rural settings.

Aim: To investigate whether multiple-dose charcoal could be a low-cost option for treating oleander poisoning. **Methods:** A prospective randomized double - blinded, placebo-controlled trial done in an emergency department of a university hospital. Patients who consumed Oleander were included. Poly pharmacy and along with alcohol were exclude. Patients with Oleander poisoning received one dose of activated charcoal (standard treatment) and then randomly assigned either 50 g of activated charcoal four times a day for 3 days or sterile water (as a placebo). All other aspects of treatment were carried out as per Guidelines. **Results:**

32 victims were involved during six month period 16 were belong to study group & remaining were in control group. There were no significant differences in demographic data, time of arrival & time to start treatment.

Patient Character (Mean)	A.C (n=16)	Placebo (n=16)
Age in years	25.2	23.5
Time of presentation after ingestion (hrs)	7.8	8.2
NO. of seed	5	4
Heart rate (b/min) base line	58	56
Arterial Sr. K+ (mmol/l) (Base line)	8	4
Arrhythmia (on presentation)		
Arrhythmia degenerated over 24 hrs	1	10

Primary out come	AC (n=16)	Placebo
Discharge	15	5
Death	0	5
Secondary out come		
Need for cardiac pacing	1	14
Mean dose of atropine (mg)	2.0	5.1
ICU stay (days) (median)	3 (2-4)	6 (3-14)

(range)		
Life threatening arrhythmia	1/26	10/16

Conclusion: Multiple-dose activated charcoal is safe and effective in reducing death and life-threatening cardiac arrhythmias after yellow oleander poisoning.