

**Management of yellow oleander poisoning (YOP) with multiple-dose activated charcoal: a randomized placebo controlled trial**

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**BACKGROUND:** Self-poisoning with yellow oleander results in many deaths due to cardiac toxicity from glycosides in the seeds. Activated charcoal binds glycosides in the gut lumen. However, glycosides are re-secreted in the gut, and treatment with single-dose activated charcoal may not be adequate. Objective: Study the efficacy of multiple-dose activated charcoal in the Treatment of YOP. Method: A randomized placebo-controlled trial was conducted in the Kurunegala Teaching Hospital from November 2001 to June 2002. Primary end-point was death, and secondary end-points were need for ICU admission, need for cardiac pacing or administration of anti-digoxin Fab. After informed consent, 401 patients (M:F = 198:203; mean age = 23.8 yrs) were randomized to receive either 50 g of activated charcoal six-hourly for three days or placebo. A standard treatment protocol was used in all patients. All were monitored for cardiac events. **RESULTS:** 201 patients received treatment. Groups were well matched for age, sex, number of seeds ingested, time to hospital after ingestion and haemodynamic status on admission. Results are shown in the table.

	<b>Placebo(n=200)Treatment=201</b>		<i>P value*</i>
	<b>n (%)</b>	<b>n (%)</b>	
Death	16 (8.0)	5 (2.5)	0.025
ICU admission	16 (8.0)	5 (2.5)	0.025
Cardiac pacing	11(5.5)	1 (0.5)	0.008
Antidigoxin Fab	7 (3.5)	0 (0.0)	0.022

The drug was safe and well tolerated.

**CONCLUSION:** Multiple-dose activated charcoal is effective in reducing mortality after YOP, and should be given to all patients. By reserving expensive treatments for the minority of patients not responding to this intervention, the cost of treatment could be reduced.