

## Acute intentional self-poisoning with a selective Herbicide Fenoxaprop-P-ethyl (FPPE) .A prospective observational study

M.Shukry<sup>1</sup>, M.Ashrafdeen<sup>1</sup>, C.Palagasinghe<sup>1</sup>, A.Dawson<sup>1</sup>, I. Bandara<sup>1</sup>, N.Buckley<sup>1,2</sup>, F.Mohamed<sup>1</sup>

<sup>1</sup> SACTRC Faculty of Medicine, University of Peradeniya, Sri Lanka

<sup>2</sup>Department of Clinical Pharmacology and Toxicology, Canberra Clinical School, Australia.

**Background:** FPPE is a selective aryloxy phenoxy-propinoate herbicide. It inhibits fatty acid biosynthesis; by inhibiting acetyl CoA carboxylase enzyme found in plant chloroplasts and mammalian liver (1-2). **Objective:** Our objective is to describe the symptoms and primary outcomes from intentional poisoning with FPPE herbicide

**Method:** All FPPE poisoned patients presenting to the two General Hospitals had data prospectively collected by trained doctors until death or discharge between May 2002 to December 2006. From the majority of patients a plasma sample taken on admission to confirm exposure and were asked to consent for multiple samples.

Ingestion of FPPE was established from the bottle and or label brought to the hospital or verbally from patient or a relative who witnessed the event. The plasma samples have not yet been analyzed. **Results:** There were 54 cases with a history on FPPE ingestion out of a total of 12,892 (0.4%) poisoning patients. The median hospital stay, estimated volume ingested and time to present to hospital since ingestion were 2 days, 30 ml, and 4 hours respectively. On admission complaints, see table 01. Forced emesis was done for 37 patients and 5 patients had undergone gastric lavage. These may have contributed to high rate of vomiting and epigastric burning reported.

On admission examination findings, see table 02. Four patients had a reduced level of consciousness on admission (GCS 9 -14), resolving within a few hours, thought to be due to co-ingestion of alcohol. All patients were given symptomatic and supportive care. There were no subsequent adverse cardio-vascular, respiratory or neurological events needed for ventilation or intensive care treatment. The case fatality was zero (95% CI: 0 to 6%) **Conclusion:** There is no published literature on human cases of FPPE. These data suggest that the FPPE is a safe herbicide in acute poisoning particularly compared with other herbicides such as paraquat (Case fatality >70%), glyphosate (3.4%), MCPA (5%) and propanil (10.5%) **Reference:** Burkle WL et al. DPR, Pesticide Registration Library Doc. No. 51910-031, 1985

Table 1

Complaints	Percentage
Vomiting	41% (22)
Epigastric burning	41 (22)
Difficulty in breathing	26 (14)
Diarrhoea	2 (01)

Rhonchi	2 (01)
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Table 2

<b>Examination findings</b>	<b>Value (mean)</b>	<b>95% CI</b>
Pulse rate beats/min	89	84 to 94
Blood pressure mmHg	120/80	116 to 125

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