POISONING WITH DELIBERATE SELF-HARM MANAGED IN A 23HR EMERGENCY DEPARTMENT OBSERVATION UNIT

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Objectives: A deliberate self-poisoning protocol was started in the emergency department (ED) short stay unit (SSU) in 2011, whereby suitable patients with mild to moderate poisoning may be admitted for treatment up to 23 hours. We describe our experience with this protocol, and report the demographics, exposure patterns and clinical outcomes of these patients.

Methods: A retrospective 2-year review (1/4/2013 to 31/3/2015) was done for all patients admitted under the SSU deliberate self-poisoning protocol. Inclusion criteria were patients aged 12 years and above with deliberate exposure to potentially toxic substances, requiring an extended period of care. Exclusion criteria were i) hemodynamically unstable patients, ii) severe poisoning requiring prolonged or ICU care, iii) evidence of end organ injury, and iv) high risk psychiatric behavior. Data collected included patient demographics, exposure patterns (types of poison, severity of poisoning, treatment), and clinical outcomes (disposition, duration of stay, complications). The poisoning severity score (PSS) was used to grade poisoning severity during the initial ED assessment.

Results: A total of 203 patients were admitted. Seventy percent were female patients, and the majority was Chinese (64%). The median age was 30 (interquartile range: 21-41). The most commonly implicated poison classes were analgesics (51%), sedatives (15%) and antidepressants (13%). Majority of patients (67%) had mild poisoning (PSS 0-1), while 33% had moderate or severe poisoning (PSS 2-3). The most common organs systems involved were gastrointestinal (36%), neurological (33%) and cardiovascular (9%) systems. Decontamination with activated charcoal was given to 15% of patients. Paracetamol was ingested in 39% of cases, and N-acetylcysteine (NAC) was given as antidote where indicated. Only 7% of patients were admitted as inpatients as they required medical treatment beyond 23 hours. All of these cases involved poisoning by analgesics or irritants. Most patients were discharged from SSU with psychiatric follow-up, while 8 patients (4%) were discharged against medical advice. The mean duration of SSU stay was 19 hrs. A higher PSS (2-3) in ED was not associated with a higher likelihood of inpatient admission compared with a lower PSS (0-1) (10.3% vs 6.3%, p=0.428).

Conclusions: The ED SSU provides a safe and effective alternative to hospitalization for patients with mild to moderate poisoning requiring an extended duration of care. Most patients can be managed with supportive care; NAC could be given where indicated. A higher ED PSS score did not predict inpatient admission.