Plant Poisonings in Australia; A Review of Calls to the Queensland Poisons Information Centre

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Introduction

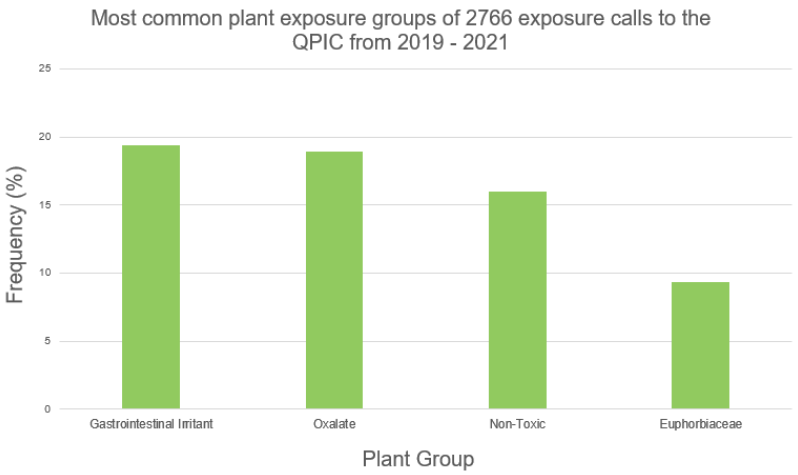
- Plant exposures are a common reason for people to seek advice from Poisons Information Centres.[1]
- The literature describing plant poisonings in Australia is limited and focusses only on exposures resulting in significant toxicity.
- We aimed to characterise all plant exposures referred to an Australian state-based Poisons Information Centre, with a particular focus on symptomatology and referral advice

Methods

- This study is a retrospective review of calls to the Queensland Poisons Information Centre (QPIC) regarding plant exposures between January 2018 – December 2021
- Data was extracted from the QPIC for patient demographics, caller details, exposure characteristics (plant, site of exposure, route of exposure, any co-ingestions, symptoms) and referral advice (non-medical or medical).
- Chart review was performed for severe cases.
- Poison Severity Scores (PSS) for acute poisoning were calculated for the severity of poisoning in each case. [2]
- Descriptive statistics were used, and performed in GraphPad Prism 7.0d.

Results

- Overall, there were 3155 calls (including 389 recalls) recorded.
- Most calls were made concerning exposures in children aged 1-4 years (46.8%). These were most frequently made by a family member or carer (73.5%). Most calls were from home (81.6%).
- Plant exposures were mostly unintentional (98.4%), and the oral route of exposure was most common (81.9%).
- The plant involved was known in 2366 calls (85.5%). The commonest plant groups are graphed below:



- By species, the most frequent plants exposed were *Euphorbia spp.* (9.6%), Elephant's Ear (6.5%), and *Duranta Erecta* (5.6%)
- Patients were mostly asymptomatic (59.4%) or experienced mild poisoning (37.4%). Only 18 (0.6%) experienced moderate or severe poisonings.
- Severe poisonings was mostly observed in adult males using plants for their sedative or anticholinergic properties.
- Medical review was advised in 409 (12.9%) of cases. These were mostly in adults following ocular exposures to *Euphorbiaceae.*

Discussion & Conclusions

- Plant exposures were mostly accidental paediatric exposures and relatively benign. In the majority of cases, patients were either asymptomatic or experienced mild toxicity that required no medical referral.
- Medical review was advised more commonly following exposures to *Euphorbiaceae*, gastrointestinal irritants, and oxalates. Severe toxicity was rare, and most often occurred in young adults using plants for recreational purposes.
- The findings of our study are consistent with the wider literature reporting on plant poisonings globally.[3-4]

References

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