

# SID



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## کارگاه های آموزشی مرکز اطلاعات علمی جهاد دانشگاهی



مباحث پیشرفته یادگیری عمیق؛  
شبکه های توجه گرافی  
(Graph Attention Networks)



کارگاه آنلاین آموزش استفاده از  
وب آو ساینس



کارگاه آنلاین مقاله روزمره انگلیسی

## A Case of Non-Fatal Oleander Poisoning

### Dear Editor,

We present a case of non-fatal poisoning with oleander decoction in a 24-year-old pregnant woman. *Nerium oleander*, an evergreen ornamental plant, native in the Mediterranean, is cultivated worldwide particularly in warm temperate and subtropical areas. Elsewhere, where the shrub is not frost-tolerant, e.g. in Central and Western Europe, it may be grown as a conservatory plant.<sup>1</sup> The plant is grown throughout Iran and is more common in eastern and southern provinces.<sup>2</sup> Application of oleander as a pharmaceutical product, rodenticide, and insecticide has been widely recognized.<sup>3,4</sup> Parts of the plant can be ingested accidentally or used in suicidal attempts, leading to oleander poisoning, with gastrointestinal symptoms (nausea, vomiting, abdominal pain, diarrhea) and cardiovascular symptoms [sinus bradycardia, atrioventricular (AV) block and fibrillation].<sup>5</sup> A 24-year-old pregnant woman was brought to the Emergency Department of Faghihi Hospital affiliated to Shiraz University of Medical Sciences in Shiraz, southern Iran with nausea, vomiting, diarrhea, malaise and abdominal pain of approximately 4 hours'

duration. Her symptoms started few minutes after ingesting oleander decoction in order to induce abortion. Also she was complaining of blurred vision, diplopia, dizziness, palpitation and numbness of fingers and toes. On physical examination, she had normal range blood pressure and bradycardia with irregular pulses. Other physical examinations were unremarkable. Initial laboratory tests showed leukocytosis and hyperkalemia (K=6.3 meq/L). ECG revealed bradyarrhythmia (SA node wenckebach block) and S-T segment depression with a "scooped" or "hockey stick" pattern, that is fairly characteristic for digoxin toxicity. On the other hand, ECG showed sinus arrhythmia, sinus pause and Q-T shortening (Figure 1). QTc (Q-T corrected) was 0.28 msec. There was no history of any underlying medical problem or any specific medication. The patient's heart examination exhibited irregular rhythm and bradycardia without murmur. Her lungs were clear on auscultation. Vital signs included temperature of 37.1°C; respiration rate 18 breaths/min, heart rate, 54 beats/min and blood pressure 90/70 mmHg. Further investigations on patient's history revealed that she had been under a great deal



**Fig. 1:** Bradyarrhythmia (SA node wenckebach block) and S-T segment depression with a "scooped" or "hockey stick" pattern in ECG on admission.

of stress recently and that she had been taking oleander decoction to induce abortion for her unwanted pregnancy. She was admitted in CCU with constant ECG monitoring, supportive care and electrolyte correction. After 3 days, she was discharged with a normal ECG and no adverse outcomes to her pregnancy.

The present case is a poisoning report with oleander decoction in a subject who subsequently recovered following supportive care including NG washing, hydration, electrolyte correction and bedside atropine. To date, only a few reports of oleander poisoning in humans have been published.<sup>6,7</sup> In the case reported by Wasfi,<sup>8</sup> the symptoms were complicated by complete heart block, cardiac arrest, ventricular fibrillation and multiple organ failure. The patient was connected to a mechanical ventilator and received fentanyl, propofol, morphine, midazolam and digoxin binding antibody, nonetheless he expired. In another similar case report,<sup>5</sup> the patient improved after intermittent atrioventricular block and was treated conservatively (activated charcoal combined with sodium sulfate and a temporary external cardiac pacemaker). In the present report, the patient was

treated conservatively and the symptoms were complicated by an S-T segment depression with a “scooped” or “hockey stick” pattern on ECG. This is the first case of oleander poisoning that the patient had ingested oleander for abortion. This report of non-fatal oleander poisoning underlines the importance of toxicological screenings in such emergency units. The approach to treatment depends on the patient’s neurological, cardiac and circulatory stability.

**Keywords:** Digoxin; Toxicity; Oleander; Abortion

**Conflict of interest:** None declared.

**P Peymani\*, N Zamiri, J Tahmasbi**

*Health Policy Research Center, Shiraz University of Medical Sciences, Shiraz, Iran*

\*Correspondence: Payam Peymani, PhD, Health Policy Research Center, Shiraz University of Medical Sciences, Shiraz, Iran. Tel: +98-711-2309615, Fax: +98-711-2309615, e-mail: [Peymaniip@sums.ac.ir](mailto:Peymaniip@sums.ac.ir)  
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