



### Complications of star fruit poisoning

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**Objective:** Star fruit (*Averrhoa carambola*) is popular fruit among Sri Lankans as a fruit and herbal remedy for diabetes mellitus. The complications associated with consumption of star fruit are not known to the public. We discuss a case series of patients with star fruit poisoning presenting with nephropathy and neurotoxicity.

**Methods:** We retrospectively reviewed the hospital records of six patients who had intoxication after ingestion of star fruit, at Teaching Hospital Karapitiya from June 2016. Clinical presentation, complications and outcome of these six patients were traced. Before the intoxication episodes, three had normal renal function, two had stable stage III chronic kidney disease (CKD) and one patient was on regular haemodialysis for end stage renal disease (ESRD).

**Results:** Five patients had acute star fruit intoxication while one had chronic exposure for more than two years. The most common symptoms of acute intoxication were nausea, vomiting, abdominal and back pain (5/6). Reduction of urine output and rising of serum creatinine were seen in all patients. One patient had hiccups, confusion and seizures with normal CT brain and lumbar puncture. The renal histopathology was available in five patients. It showed tubular damage with calcium oxalate crystals and interstitial inflammation. Interstitial fibrosis was seen in one patient who was dependent on dialysis. Outcome of patients were as follows; in three patients (3/6) acute kidney injury completely recovered; one remained in stage III CKD (1/6); one became dialysis dependent due to chronic irreversible renal damage (1/6). The patient who was on regular haemodialysis for ESRD succumbed to illness due to neurotoxicity.

**Conclusion:** This case series highlights oxalate nephropathy as the main complication of star fruit intoxication. Neurotoxicity was a rare complication seen only in one end stage renal disease patient. Awareness of these uncommon complications is important to prevent morbidity and mortality of patients presenting with star fruit poisoning.