

## Poster Abstracts

### PO-44

#### ACUTE KIDNEY INJURY DUE TO CONSUMPTION OF 'AVERRHOA BILIMBI' FRUIT JUICE

M Chartkul<sup>1,2,3</sup>, S Chomchai<sup>1,2</sup>

*<sup>1</sup>Department of Preventive and Social Medicine, Faculty of Medicine, Siriraj Hospital, Mahidol University, Bangkok, Thailand, <sup>2</sup>Siriraj Poison Control Center, Siriraj Hospital, Bangkok, Thailand, <sup>3</sup>Emergency department, Prapokkiao Hospital, Chanthaburi, Thailand*

**Objectives:** Averrhoa bilimbi, commonly known as 'bilimbi', belongs to family Oxalidiaceae. Bilimbi is a small tree up to 15 meters high. Fruits are fairly cylindrical with five broad rounded longitudinal lobes, and produced in clusters. The fruits are very sour. The fruits can be eaten fresh or processed as dried fruits. Oxalic acid concentrations in bilimbi ranged between 8.57 and 10.32 mg/g. We report a case of acute kidney injury due to drinking bilimbi juice.

**Methods:** We report clinical data and outcome of a single case.

**Results:** A 57-year-old female regularly drinks fruit and vegetable juice. Seventeen days before presentation, she blended approximately 100 home-grown bilimbi fruits for 1000 mL of juice. She drank about 350 ml of juice, while her sister took approximately 200 ml. She developed severe nausea thirty minutes later, which followed by vomiting, watery diarrhea, flank pain and loss of appetite. She presented at the hospital on day 4 due to persistent nausea and flank pain. Physical assessment revealed normal vital signs and hyperactive bowel sounds. Her initial serum creatinine was 1.94 mg/dL (baseline 0.56 mg/dl). Twenty four-hour urine oxalate concentration was 0.28 mg/dl. After treatment with ondansetron and intravenous crystalloid hydration, her symptoms gradually improved. She was admitted for 5 day with serum creatinine 1.45 mg/dL before discharge. Her follow-up serum creatinine concentrations were 0.92, 0.85 and 0.72 mg/dL on days 23, 37 and 60, respectively. Her sister experienced nausea and vomiting, which did not require hospitalization. She had an insignificant elevation in serum creatinine.

**Conclusion:** We report a case of acute kidney injury due to 'Averrhoa Bilimbi' fruit juice consumption. Early symptoms were nausea and vomiting. Postulated mechanism of illness is the deposition of oxalate in kidney. The mainstay of treatment is supportive care. Consumers and venders of fruit juice should realize that 'Averrhoa Bilimbi' fruit juice can cause acute intoxication.