[ID-P#088] The prediction the outcomes for paraquat poisoning

Ken Iseki[a], Saki Takeda[b] and Makoto Onodera[c]

[a]Department of Emergency and Critical Care Medicine, Fukushima Medical University, School of Medicine; [b]Department of Forensic Medicine, Fukushima Medical University, School of Medicine; [c]Department of Regional Emergency Medicine, Fukushima Medical University

Background: Paraquat is widely used as herbicide and pesticide in Asia and is highly toxic to humans. The plasma paraquat concentration is a well- known prognosis prediction factor for the poisoning patients, although it needs the measuring device such as HPLC. On the contrary, urine paraquat test using sodium hydrosulfite is a simple and rapid method for the diagnosis.

Case presentation: A 70-year-old man was admitted to the emergency department due to intentional ingestion of a small amount of Preglox L (paraquat: dichloride 5% and diquat: 7%) for a suicidal attempt. He complained about discomfort and nausea. The initial plasma paraquat concentration was below the detection level (<2μg/mL) but the urine paraquat test was strongly positive. Because of no definitive treatment for paraquat intoxication, he was given gastric lavage and the conservative therapy such as intravenous fluid infusion. Despite these, he died of respiratory failure 4 days after the ingestion.

Discussion: Although his plasma paraquat concentration was below the Proudfoot's curve for the prognosis prediction, the urine paraquat test was strongly positive and predicted the fatality.

Conclusion: A small amount of paraquat poison leads to fatal outcomes. The urine paraquat test is useful and effective to predict the outcomes.