



## OP – 15

### Prognostic value of semi-quantitative urine paraquat test in the patients with acute Paraquat poisoning

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**Objective:** To evaluate the value a semi-quantitative urine paraquat test in predicting severity in acute paraquat poisoning.

**Methods:** 186 patients with acute paraquat poisoning were categorized into four groups according to their semi-quantitative urine paraquat test results: +group (n=37), ++group (n=25), +++ group (n=27), and ++++group (n=97). Clinical features, severity of hepatic and renal injury, and incidence of respiratory failure were compared between these four groups. Kaplan-Meier analysis was used to evaluate the survival rate.

**Results:** Of the 186 patients with paraquat poisoning, 92 died (mortality rate 49.46%). No patient in +group had serious complications. The incidence of acute respiratory failure, renal failure, and hepatic failure in was significantly higher in the ++++group when compared to the +group, ++group, and +++group ( $P<0.05$ ). Urine paraquat concentration was positively correlated with hepatic and renal dysfunction (Spearman correlation coefficient=0.756, 0.574,  $P<0.01$ ). Kaplan-Meier survival analysis showed that the mortality of ++++group (78.35%) was significantly higher than that of +++group (55.6%), ++group (4.0%), and +group (0%),  $P<0.05$ .

**Conclusion:** The semi-quantitative urine paraquat test is promising in the evaluation of paraquat poisoning severity. This test can be used to guide therapy and to predict outcomes in patients with acute paraquat poisoning.