

Poster Abstracts

PO-09

PROGNOSIS VALUE OF URINE PARAQUAT SEMI-QUANTITATIVE IN THE PATIENTS WITH ACUTE PARAQUAT POISONING

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Objectives: To investigate the relationship between semi-quantification of urine paraquat and the severity of acute paraquat poisoning, and to evaluate the prognostic value of the test in patients with acute paraquat poisoning.

Methods: A total of 186 patients with acute paraquat poisoning were categorized into four groups according to their semi-quantification results of urine paraquat: +group(n=37), ++group(n=25), +++group(n=27), and++++group(n=97). The clinical features, severity of hepatic and renal injuries and respiratory failure were compared between these four groups. Kaplan-Meier analysis was used to evaluate the survival rate. Receiver operating characteristic (ROC) curve was used to analyze the urine paraquat concentration in the value in prognosis evaluation of the patients with paraquat poisoning.

Results: The 60-day mortality was 49.46%. No patient in+group was found to have serious complications,the incidence of acute respiratory failure, renal failure, and hepatic failure in++++group was significantly higher than that in +group, ++group, and+++group ($P<0.05$). The urine paraquat concentration was positively correlated with severity of hepatic and renal injuries ($r=0.574$, $r=0.756$, respectively, $P<0.001$). Kaplan-Meier survival analysis showed that the mortality of++++group (78.35%)was significantly higher than that of+++ group(55.56%), ++group(4.0%), and+group(0)($P<0.05$). The urine paraquat concentration of the areas under the ROC curve and 95%CI were 0.976(0.961,0.991).

Conclusion: The semi-quantification of urine paraquat is a promising test in evaluating the severity of acute paraquat poisoning.This test can be used to guide therapy and to predict the outcomes of patients suffering acute paraquat poisoning.