



# Clinical analysis of penheyclidine hydrochloride combined with hemoperfusion in the treatment of acute severe organophosphorus pesticide poisoning

M.J. Liang and Y. Zhang

Department of Emergency,  
The First Affiliated Hospital of Dalian Medical University, Dalian, China

Corresponding author: M.J. Liang  
E-mail: mingjiliang@126.com

Genet. Mol. Res. 14 (2): 4914-4919 (2015)

Received April 28, 2014

Accepted August 18, 2014

Published May 11, 2015

DOI <http://dx.doi.org/10.4238/2015.May.11.24>

**ABSTRACT.** This study aimed to observe the clinical curative effect of penheyclidine hydrochloride (PHC) combined with hemoperfusion in treating acute severe organophosphorus pesticide poisoning. We randomly divided 61 patients with severe organophosphorus pesticide poisoning into an experimental group (N = 31) and a control group (N = 30), and we compared the coma-recovery time, mechanical ventilation time, healing time, hospital expenses, and mortality between the two groups. The coma-recovery time, mechanical ventilation time, and healing time were lower in the experimental group than in the control group ( $P < 0.05$ ), while the hospitalization expenses were higher in the experimental group than in the control group ( $P < 0.01$ ); moreover, no significant difference was observed in the mortality rate between the two groups. Thus, PHC combined with hemoperfusion exerts a better therapeutic effect in acute severe organophosphorus pesticide poisoning than PHC alone.

**Key words:** Organophosphorus pesticide poisoning; Hemoperfusion; Penheyclidine hydrochloride