

## ORAL 15 [ID#54]

### **Correlations Between Start Time and Effect in Treatment of Acute Severe Organophosphorus Pesticide Poisoning by Hemoperfusion**

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**OBJECTIVE:** To investigate the correlations between start time and effect in treatment of acute severe organophosphorus pesticide poisoning by hemoperfusion.

**METHODS:** A total of 83 cases of severe acute severe organophosphorus pesticide poisoning were retrospectively reviewed and divided into 4 different groups, according to application status and start time of the treatment approach of hemoperfusion. Perfusion groups received hemoperfusion once per day for 2-3 days which started within 12 hours, between 12 hours to 24 hours, and after 24 hours for group A, B, and C respectively; the control group on the other hand, received no hemoperfusion at all. Time of recovery in terms of cholinesterase (ChE) activity of each group were measured and compared.

**RESULTS:** ChE activity and half recovery time (T50) measured 1d, 2d, 3d, and 4d after treatment were significantly different among the four groups ( $P < 0.05$ ), whereas not statistically different between group C and the control group ( $p > 0.05$ ).

**CONCLUSION:** Hemoperfusion, aside from conventional therapy, started within 24h, especially within 12h, might be of great clinical efficacy for treatment of acute severe organophosphorus pesticide poisoning, while hemoperfusion started 24h after the event may not be clinically effective.