TITLE: High Dose Pralidoxime [PRX] Treatment Prolongs Time to Extubation [TTE] and Increases Mortality in Paraoxon [POX] Exposed Minipigs

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HIGH DOSE PRALIDOXIME (PRX) TREATMENT PROLONGS TIME TO EXTUBATION (TTE) AND INCREASES MORTALITY IN PARAOXON (POX) EXPOSED MINIPIGS

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ABSTRACT

Organophosphates are inhibitors of serine hydrolases. Oximes are clinically available enzyme reactivators.

To determine in vivo the effect of high dose PRX use on "time-to-extubation (TTE)" and mortality as compared to identical therapy without PRX.

12 anaesthetized minipigs were used. All pigs received iv-POX (1mg/kg BW) over 50 minutes. Group one (n = 6) received conventional intensive care therapy as described previously [J Appl Toxicol 18: 293 - 298]. Group two (n = 6) received in addition iv-PRX 10 g (≈ 300 mg/kg BW). Before [base-line;BL], after POX application (50min) and then at 1, 2, 3, 4, 8 and 16 hours after POX AChE and BChE activities were measured. Statistics: rank order test; significance for p ≤ 0.05.

In group one TTE was 7.2 ± 4.4 h after last measurement. Mortality was 0. In group two TTE was 14.7 ± 6.4 h after last measurement. Mortality was 4/6.

Pralidoxime therapy has no beneficial effect and its use can not be recommended.

KEYWORDS
Pralidoxime, reactivators, OP poisoning

(The paper was not presented)