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Titel des Beitrags: Organophosphate poisoning in the developed world - a single centre experience from here to the millennium.

Abstract: Organophosphate (OP) poisoning is still associated with high morbidity and mortality rates, both in resource-poor settings and in well-developed countries. Despite numerous publications dealing with this particular poison, detailed clinical data on more severe overdoses with these agents are relatively sparsely reported. A retrospective study was consequently conducted on 33 patients with OP poisoning admitted to our intensive care unit (ICU) to provide additional data on clinical features. We included moderate to severe poisonings between 2000 and 2012 who required admission to ICU. Patients ingested dimethyl-OPs in 19 cases, diethyl-OPs in 8 cases and otherwise classified OPs in 6 cases. Death (5/33) occurred rather late and only one of these fatalities died during on-going cholinergic crisis. Of the survivors (28/33), 71% recovered fully while 29% showed predominantly neurological disabilities before being transferred to neurologic rehabilitation. Aspiration pneumonia predominated in 27/33 patients and one patient died in refractory acute respiratory distress syndrome (ARDS). The intermediate syndrome occurred twice and cardiopulmonary resuscitation had to be performed in 6/33 patients. Fatalities showed a higher Poison-severity-score, APACHE-II-score and SOFA-score on admission compared with survivors and they showed significantly longer...
QTc-time in the ECG, lower systolic blood pressure and heart rate, a lower pH and a lower base excess on admission. Patients with diethyl-OPs required intubation significantly earlier and showed lower and more sustained inhibited activity of the plasma-cholinesterase on admission compared with patients ingesting dimethyl-OPs. Treatment with atropine and obidoxime was comparable between these groups and severity of poisoning, outcome, hemodynamics on admission, duration of mechanical ventilation and length of stay in the ICU did not significantly differ between the involved group of dimethyl- and diethyl-OPs. We conclude that the fatality rate in our patient cohort treated in a well-staffed and equipped ICU of a developed country is quite similarly high compared with the rate observed in developing countries. Patients died rather late when severe cholinergic crisis had mostly been overcome and death was therefore related to non-poison specific complications.