



Olanzapine in emergency department patients: Differential effects on oxygenation in patients with alcohol intoxication

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Agitation in the Emergency Department

Agitation in the Emergency Department (ED) has been an important issue in the emergency department environment. When verbal assuagements fail to de-escalate the situation, antipsychotics are usually considered to resolve the situation. In the past, first generation antipsychotics were implemented to calm emergency department agitation, however, side effects occur with the administration of these antipsychotics, main consequences being over-sedation and dystonia (abnormal muscle tone). Not only does this delay diagnosis as the patient is often sleeping, but it also takes up patient bed availability in the ED.

Olanzapine and Inspiration for study

Our project focused on a specific second generation anti-psychotic, olanzapine, with significantly less negative consequences than first generation antipsychotics. Wilson et al. found a general decrease in oxygen saturation levels upon the administration of intramuscular (IM) olanzapine paired with benzodiazepines in intoxicated patients. The retrospective study did not account for oral (PO) olanzapine.

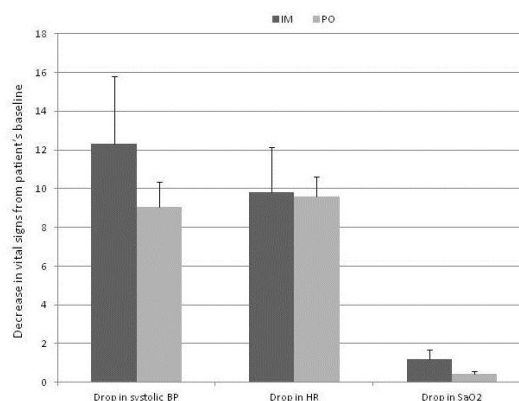
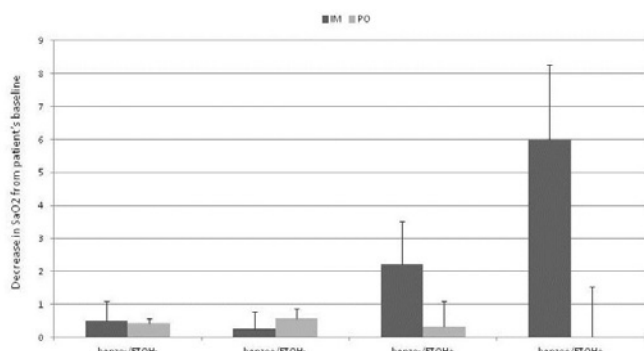
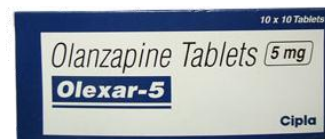
The Question

In agitated patients, does PO olanzapine result in vital sign changes in agitated patients, especially of oxygen saturation levels in intoxicated patients?

Methods

This was a retrospective study of ED patients between 2004 and 2010. The sample size was 482 individuals, of which 275 patients with qualifying vital signs. Specific variables were assessed.

Results and Conclusions



PO olanzapine was associated with no significant vital sign changes like the effects of IM olanzapine. This suggests that PO olanzapine may be a safer method than IM olanzapine in intoxicated agitated patients.

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