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Recent guidelines from the American Association of Emergency Psychiatry recommend **oral second generation antipsychotics** as first line therapy for the treatment of acute agitation in the emergency department with intramuscular (IM) second generation antipsychotics as an alternative. However, currently, IM haloperidol and lorazepam, often used in combination, continue to be the preferred drugs of choice for most EM physicians for the agitated patient. Why is this?

One recent study into the general practice of emergency physicians showed that first generation antipsychotics, specifically haloperidol, are more frequently used compared to newer second generation antipsychotics. Some discussion into the reason for such practice includes the argument that oral medications require patient cooperation and may have slower onset of action which makes the medications an inappropriate choice in the setting of acute agitation. Additionally, authors have suggested that perhaps in the patients with severe agitation in the ED, there is a higher incidence of agitation secondary to alcohol or drug abuse. In these patients, who often will be subsequently discharged from the emergency department once detoxified, the risks in the use of first generation antipsychotics may be less compared to the population of psychiatric patients who would have increased exposure to and higher doses of antipsychotics.

Use of second generation antipsychotics is generally considered to be safer than first generation medications due to their **decreased effects on QTc prolongation and decreased risk for extrapyramidal side effects**. Multiple studies in psychiatric journals have shown the benefits of using second generation antipsychotics. Inherently there are risks to the administration of IM antipsychotic agents including iatrogenic needle injury and risks associated with physically restraining the agitated patient. This topic does not seem to be well-studied in the emergency medicine literature.

In one review of studies in the cooperative agitated patient show that **2 mg oral risperidone with 2 mg oral lorazepam** was as effective as IM 5 mg haloperidol with IM 2 mg lorazepam at reducing agitation. **IM or ODT 10 mg olanzapine** has also been shown to be more effective in reducing agitation compared to IM 7.5 mg haloperidol. However, no studies have compared oral olanzapine to IM haloperidol with lorazepam. The authors concluded that in patients who are cooperative enough to take oral medications, treatment with oral second generation antipsychotics is as effective and as quick as IM antipsychotics in reducing agitation. Additionally, the studies showed use of oral medications resulted in similar or fewer treatment-related side effects.

This topic is obviously controversial. Another systematic review showed that use of haloperidol may be superior to that of second generation antipsychotics as the drug is generally less expensive and is widely available. The review also recommended that haloperidol be used in tandem with other medications to minimize the occurrence of adverse side effects. The review showed that promethazine, benzodiazepines, and anticholinergics have been useful in reducing side effects of haloperidol but should be used with caution as they also add to the sedating effects of haloperidol.

Overall, **more data is needed to determine the optimal regimen for the treatment of the acutely agitated patient**. Understandably, there are no studies specifically addressing this for the extremely agitated patients as this is technically and ethically difficult. This review does remind me to consider strongly second generation antipsychotics in the cooperative but agitated patient rather than jumping straight to haloperidol.

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