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# This Article Corrects: “Best Practices for Evaluation and Treatment of Agitated Children and Adolescents (BETA) in the Emergency Department: Consensus Statement of the American Association for Emergency Psychiatry”

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Best Practices for Evaluation and Treatment of Agitated Children and Adolescents (BETA) in the Emergency Department: Consensus Statement of the American Association for Emergency Psychiatry  
Gerson R, Malas N, Feuer V, Silver GH, Prasad R, Mroczkowski MM

Erratum in

*West J Emerg Med.* 2019 July;20(4):688-689. There was a dosing error in Table 2 regarding haloperidol dosing in pediatric agitation. The dose is listed as 0.55 mg/kg/dose and should be corrected to 0.05-0.1 mg/kg/dose.

Abstract

**Introduction:** Agitation in children and adolescents in the emergency department (ED) can be dangerous and distressing for patients, family and staff. We present consensus guidelines for management of agitation among pediatric patients in the ED, including non-pharmacologic methods and the use of immediate and as-needed medications.

**Methods:** Using the Delphi method of consensus, a workgroup comprised of 17 experts in emergency child and adolescent psychiatry and psychopharmacology from the the American Association for Emergency Psychiatry and the American Academy of Child and Adolescent Psychiatry Emergency Child Psychiatry Committee sought to create consensus guidelines for the management of acute agitation in children and adolescents in the ED.

**Results:** Consensus found that there should be a multimodal approach to managing agitation in the ED, and that etiology of agitation should drive choice of treatment. We describe general and specific recommendations for medication use.

**Conclusion:** These guidelines describing child and adolescent psychiatry expert consensus for the management of agitation in the ED may be of use to pediatricians and emergency physicians who are without immediate access to psychiatry consultation.

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**Table 2.** Medication reference.

| Medication                       | Dose   | Peak effect  | Max daily dose   | Notes/monitoring   |
|----------------------------------|--|--|--|--|
| Diphenhydramine (antihistaminic) | PO/IM: 12.5-50mg<br>1 mg/kg/dose   | PO: 2 hours  | Child: 50-100 mg<br>Adolescent: 100-200 mg   | Avoid in delirium.<br>Can be combined with haloperidol or chlorpromazine if concerns for EPS.<br>Can cause disinhibition or delirium in younger or DD youth.   |
| Lorazepam (benzodiazepine)       | PO/IM/IV/NGT: 0.5 mg-2 mg<br>0.05 mg-0.1 mg/kg/dose                        | IV: 10 minutes<br>PO/IM: 1-2 hours                 | Child: 4 mg<br>Adolescent: 6-8 mg<br>Depending on weight/proir medication exposure | Can cause disinhibition or delirium in younger or DD youth.<br>Can be given with haloperidol, chlorpromazine or risperidone.<br>Do not give with olanzapine (especially IM due to risk of respiratory suppression.         |
| Clonidine (alpha2 agonist)       | PO: 0.05 mg-0.1 mg   | PO: 30-60 minutes                                  | 27-40.5 kg: 0.2 mg/day<br>40.5-45 kg: 0.3 mg/day<br>>45 kg: 0.4mg/day              | Monitor for hypotension and bradycardia.<br>Avaoid giving with BZD or atypicals due to hypotension risk.   |
| Chlorpromazine (antipsychotic)   | PO/IM: 12.5-60 mg (IM should be half PO dose)<br>0.55 mg/kg/dose           | PO: 30-60 minutes<br>IM: 15 minutes                | Child <5 years: 40mg/day<br>Child >5 years: 75mg/day                               | Monitor hypotension.<br>Monitor for QT prolongation.   |
| Haloperidol (antipsychotic)      | PO/IM: 0.5 mg-5 mg (IM should be half a dose of PO)<br>0.05-0.1 mg/kg/dose | PO: 2 hours<br>IM: 20 minutes                      | 15-40 kg: 6mg<br>>40 kg: 15 mg<br>Depending on prior antipsychotic exposure        | Monitor hypotension.<br>Consider EKG or cardiac monitoring for QT prolongation, especially for IV administration.<br>Note EPS risk with MDD > 3mg/day, with IV dosing having very high EPS risk.<br>Consider AIMS testing. |
| Olanzapine (antipsychotic)       | PO/ODT or IM: 2.5-10 mg (IM should be half or 1/4 dose of PO)              | PO: 5 hours (range 1-8 hours)<br>IM: 15-45 minutes | 10-20 mg Depending on antipsychotic exposure                                       | Do not give with or within 1 hour of any BZD given risk for respiratory suppression  |
| Risperidone (antipsychotic)      | PO/ODT: 0.25-1mg<br>0.005-0.01mg/kg/dose                                   | PO: 1 hour   | Child: 1-2 mg<br>Adolescent: 2-3 mg<br>Depending on antipsychotic exposure         | Can cause akathisia (restlessness/agitation) in higher doses.  |
| Quetiapine (antipsychotic)       | PO: 25-50 mg<br>1-1.5 mg/kg/dose (or divided)                              | PO: 30 minutes-2 hours                             | >10 years: 600 mg<br>Depending on prior antipsychotic exposure                     | More sedating at lower doses<br>Monitor hypotension.   |

PO, by mouth; IM, intramuscular; IV, intravenous; NGT, nasogastric tube; mg, milligram; EPS, extrapyramidal symptoms; DD, developmental disability; mg/kg, milligrams per kilogram; BZD, benzodiazepines; EKG, electrocardiogram; AIMS, Abnormal Involuntary Movement Scale; MDD, major depressive disorder; ODT, orally dissolving tablet.