

## Use of Side-Effect-Preventing Medications in Children Taking Antipsychotic Drugs

Improvement in diagnosis of psychiatric disorders in children during the past decade has resulted in more young people being prescribed antipsychotic drugs. However, treatment with these medications can cause abnormal muscle movements, termed extrapyramidal symptoms (EPS). Examples of EPS can include both an inability to initiate movements as well as the opposite—inability to remain motionless. Muscle groups commonly affected are found in the neck, eyes, tongue, or jaw. These problems seem to occur more frequently and with greater severity in children compared to adults, but newer antipsychotic drugs (termed second generation antipsychotics) are less likely to cause these problems than first generation drugs.



Typically, the medications benztropine (Cogentin), diphenhydramine (Benadryl) and trihexyphenidyl (Artane) are used to treat EPS when they occur. These three drugs, called anticholinergics, can alleviate EPS, but they also cause disruptions in learning and reasoning. This could be particularly problematic for children with psychiatric disorders since their mental health condition may already cause difficulties with school performance. A recent study examined prescribing practices of anticholinergic drugs in 152 children, 5 to 18 years of age, prescribed antipsychotic medications.

The majority of children were prescribed second generation antipsychotic medications; only 6 children were taking the first generation drugs most likely to cause EPS. Twenty-one percent of children (32 of 152) were given a prescription for an anticholinergic medication with-

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Mental Health America  
[www.nmha.org/index.cfm?objectid=C7DF980C-1372-4D20-C8BA1DC89DBEAD32](http://www.nmha.org/index.cfm?objectid=C7DF980C-1372-4D20-C8BA1DC89DBEAD32)

National Institutes of Mental Health  
[www.nimh.nih.gov/health/publications/mental-health-medications/index.shtml](http://www.nimh.nih.gov/health/publications/mental-health-medications/index.shtml)

Based on “Anticholinergic Use in Children and Adolescents After Initiation of Antipsychotic Therapy,” by Irene Hong, Jeffrey Bishop, *The Annals of Pharmacotherapy*, July/August 2010, <http://dx.doi.org/10.1345/aph.1M643>. For Our Patients is provided by *The Annals* to help explain the latest research and information relating to your medications. These summaries are for informational purposes only and are not a substitute for professional advice from your personal medical provider. If you have questions about this material, you should discuss it with your physician or pharmacist. This summary may be reproduced without permission for not-for-profit educational purposes only. Any other use must be approved by the publisher. © Copyright 2010, Harvey Whitney Books Company, [hwbooks.com](http://hwbooks.com). FOPG10 DOI 10.1345/fop.1M643

in 30 days of starting an antipsychotic drug; however, only 8% of the children actually developed EPS. Therefore, in the majority of the children given anticholinergic medications, the drugs were started “preventively” without EPS even occurring. Since most children were not taking the first generation antipsychotic drugs

that are most likely to cause EPS, and given the problems associated with anticholinergic drugs with respect to learning, memory, and school performance, it appears that guidelines are needed to define the appropriate use of anticholinergics for patients prescribed second generation antipsychotic medications.