

Methylphenidate significantly reduces lapses of attention during on-road highway driving in patients with ADHD. **J Clin Psychopharmacol** 2014 Jun 27. [Epub ahead of print]).

COMMENTARY. ADHD young adults are twice as likely to be cited for unlawful speeding and have more crashes and more accidents involving bodily injury, when compared to non-ADHD adult control subjects. These findings support a need for continued treatment of ADHD into adolescence and adulthood. Improvement of driving performance of adolescent drivers with ADHD was demonstrated using a driving simulator while taking Concerta compared to placebo [1] or immediate-release MPH [2].

References.

1. Cox DJ, et al. *Pediatrics*. 2006 Sep;118(3):e704-10.
2. Cox DJ, et al. *J Am Acad Child Adolesc Psychiatry*. 2004 Mar;43(3):269-75.

GUANFACINE EXTENDED RELEASE IN ADHD

Investigators at Massachusetts General Hospital, Boston, MA, performed a multicenter, 9-week, double-blind, placebo-controlled, dose-optimization study of guanfacine extended release (GXR, <4 mg/d) adjunctive to a long-acting psychostimulant for ADHD continued in 461 subjects. Patients were randomized to receive GXR in the morning (GXR AM), GXR in the evening (GXR PM), or placebo.

GXR treatment groups showed significantly greater improvement from baseline compared with placebo plus psychostimulant. Small mean decreases in pulse, systolic, and diastolic blood pressure were observed in GXR treatment groups. Morning or evening GXR administered adjunctively to a psychostimulant showed significantly greater improvement and generated no new safety signals. (Wilens TE, et al. A controlled trial of extended-release guanfacine and psychostimulants for attention-deficit/hyperactivity disorder. **J Am Acad Child Adolesc Psychiatry** 2012;51(1):74-85).

COMMENTARY. A similar randomized, double-blind trial of guanfacine extended release (Intuniv) administered either in the morning ((n=107) or evening (n=114) was associated with significant improvements in ADHD symptoms. Once-daily GXR monotherapy is effective, administered AM or PM [1]. The rapid-release guanfacine (Tenex) is often prescribed as an alternative to Intuniv because of cost and insurance denial. Tenex is often effective in the hyperactive/ADHD younger child with sleep disorder or tics, but drowsiness during the day may lessen the ability to focus in school. The effect of Intuniv on school performance and grades requires further study.

References.

1. Newcorn JH, et al. *J Am Acad Child Adolesc Psychiatry*. 2013 Sep;52(9):921-30.

ADVERSE EFFECTS OF MEDICATIONS FOR ADHD

CARDIAC AUTONOMIC DYSFUNCTION AND STIMULANT THERAPY

Investigators at University of Minnesota, Minneapolis, report cardiac autonomic dysfunction and arterial stiffness among children and adolescents with ADHD treated