

# Adult ADHD: Issues and Answers

CME Newsletter of the Adult ADHD Program,  
Department of Psychiatry, NYU School of Medicine

## AHA Says Perform ECG before ADHD Treatment

The American Heart Association (AHA) has stated recently that it is "reasonable and useful" to perform a baseline electrocardiogram (ECG) before starting stimulant therapy for treatment of attention-deficit/hyperactivity disorder (ADHD) in a child.<sup>1</sup> In a statement published by the journal *Circulation*, the AHA said assessment of children with ADHD should include a detailed patient and family history, a physical exam, and a baseline ECG, which often can identify cardiovascular abnormalities, such as hypertrophic cardiomyopathy, long-QT syndrome, and Wolff-Parkinson-White syndrome.

One might assume that cardiac testing should be done to ensure that the child can endure any stimulant medication he or she may be prescribed. While partially true, the reality is that ADHD may be more common in children with heart disease than in the general pediatric population. In children with cardiac abnormalities, abnormal attention scores have been reported in 45% and abnormal hyperactivity scores have been noted in 39%.<sup>1</sup> Congenital cardiovascular anomalies occur in 3 out of 4 of children with velocardiofacial syndrome, characterized by cleft palate, heart abnormalities, learning disabilities, and other problems.<sup>2</sup> ADHD affects 35%–55% of these children.<sup>3</sup> The number of undiagnosed children with heart conditions is unknown as routine heart screening is not performed, but a recent pilot study presented at the AHA's 2007 Scientific Session indicated that as many as 2% of healthy school-aged children had potentially serious undiagnosed cardiac conditions identified by an ECG.<sup>4</sup>

The intent of the AHA is not to limit the use of stimulant drugs, which have demonstrated symptomatic efficacy for ADHD. However, the group wants to ensure that the medications are used safely. According to the AHA, if evidence of heart disease is uncovered by the ECG, the patient can be treated for that disease and then can be treated for ADHD as well.<sup>1</sup>

The authors of the AHA statement offer guidelines patterned after recommendations to screen for sudden cardiac death risk (SCD).<sup>1</sup> In the case of risk assessment for stimulant medication use, the proposed guidelines are based on Level of Evidence C (consensus opinion of experts, case studies, or standard of care). Specific recommendations include review of systems with focused questions to determine symptoms of palpitations, presyncope or syncope, additional medication, and patient and family history [Table 1]. Assessment of SCD risk also includes physical examination and ECG. The screening

### Table 1. Patient and Family Histories Questions Used to Assess Cardiovascular Risk in Children With ADHD<sup>1</sup>

#### The patient history should include questions regarding:

- History of fainting or dizziness (particularly with exercise)
- Seizures
- Rheumatic fever
- Chest pain or shortness of breath with exercise
- Unexplained, noticeable change in exercise tolerance
- Palpitations, increased heart rate, or extra or skipped heart beats
- History of high blood pressure
- History of heart murmur other than innocent or functional murmur or history of other heart problems
- Intercurrent viral illness with chest pains or palpitations
- Current medications (prescribed and over the counter)
- Health supplements (herbal, vitamins, sports drinks, etc.)

#### The family history should include questions regarding:

- Sudden or unexplained death in someone young
- Sudden cardiac death or heart attack in members <35 years of age
- Sudden death during exercise
- Cardiac arrhythmias
- Hypertrophic cardiomyopathy or other cardiomyopathy, including dilated cardiomyopathy and right ventricular cardiomyopathy (right ventricular dysplasia)
- Long-QT syndrome, short-QT syndrome, or Brugada syndrome
- Wolff-Parkinson-White syndrome or similar abnormal rhythm conditions
- Event requiring resuscitation in young members (<35 years of age), including syncope requiring resuscitation
- Marfan syndrome

#### Statement of Need

Our understanding of attention-deficit/hyperactivity disorder (ADHD) continues to expand as new areas are evaluated in adult populations and new medications become available. Recent studies have explored the relationship of finger length ratios to the development of ADHD in males, but not females.<sup>1</sup> Ultimately, the study concluded that male patients with ADHD, especially those with inattentive subtype, demonstrated masculinized digit ratios compared to male controls. Other studies have looked at the effect of atomoxetine and alcohol use in abstinent ADHD adults and the diversion of stimulant medications among adolescents and young adults as an ongoing public health problem.<sup>2,4</sup> Other developments governing the treatment of patients with ADHD include a recent recommendation by the American Heart Association for a baseline electrocardiogram prior to initiating stimulant therapy to ensure prudent, safe use of these medications.<sup>5</sup> Other investigators have found the costs of treating ADHD to be nearly the same as those associated with the treatment of diabetes and significantly more than the costs of treating depression.<sup>6</sup> Finally, researchers have looked at the transdermal methylphenidate patch for timing its application to achieve best results and methods for avoiding the common complaint of application site irritation.<sup>1,8</sup>

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#### Learning Objectives

After completing this activity, you should be able to:

- Recognize the potential for cardiac abnormalities in the ADHD population, the potential consequences of initiating stimulant-based therapy, and the importance of guidelines for managing ADHD in patients with cardiac abnormalities
- Identify cost-effective treatment options for ADHD patients
- Develop a strategy for applying the methylphenidate transdermal patch to maximize benefit to the patient and prevent cutaneous reactions
- Relate recent research pertinent to atomoxetine therapy and alcohol abuse and stimulant diversion among young adults and the relationship between finger length ratios and ADHD

#### Method of Participation

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#### Intended Audience

This activity was developed for psychiatrists, primary care physicians/internists, neurologists, and psychologists.

#### Effective Dates

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strategy is useful in identifying the common causes of sudden cardiac death, which include hypertrophic cardiomyopathy, long QT syndrome, Wolff-Parkinson-White syndrome and Marfan syndrome. Children who are being considered for stimulant medication, as well as those who are already taking such agents, should be properly assessed.

Whether the risk for sudden cardiac death is heightened in patients receiving stimulant medications compared to those in the general is presently uncertain. Yet, the infrequency of this problem means that it may be unfeasible to develop evidence-based guidelines for cardiovascular monitoring of children and adolescents receiving stimulant drugs. The Agency for Healthcare Research and Quality and the FDA, are funding a retrospective study being coordinated by Vanderbilt University to perform a review of data of 500,000 children and adults to determine whether medications used to treat ADHD increase cardiac risk factors.<sup>5</sup> More data defining cardiac risk may help to outline the scope of the problem. Meanwhile, the FDA has intensified warning labels on ADHD medications and, in February 2007, instructed drug manufacturers to notify patients about the cardiovascular risks of stimulants.

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## OROS-MPH Most Economical, Says Study

A study that compared the therapeutic costs of osmotic release oral system methylphenidate (OROS-MPH), mixed amphetamine salts extended release (MAS XR), or atomoxetine found OROS-MPH to be the most economical for adults with ADHD.<sup>1</sup> The study analyzed data from an American claims database of 5 million beneficiaries aged 18 to 64 years from 31 large self-insured employers. Because the median duration of index ADHD drug therapy was calculated to be approximately 90 days, the primary measures were total direct medical plus drug costs and medical-only costs computed over 6 months following therapy initiation. Adults were required to have continuous eligibility 6 months before and 6 months after their latest drug therapy initiation and no ADHD therapy during the previous 6 months. Cost was measured as the payment amount made by the health plan to the

provider rather than billed charges, and it excluded patient copayments and deductibles. Medical costs included costs incurred for all-cause inpatient and outpatient/other services. Generalized linear models were used to compare costs of adults receiving alternative therapies, adjusting for demographic characteristics, substance abuse, depression, and the Charlson Comorbidity Index.

Of the 4569 patients who received 1 of the 3 ADHD drug therapies, 32% received OROS-MPH for a median duration of 99 days of therapy, 34% received MAS XR for a median 128 days, and 34% received atomoxetine for a median 86 days. The study made the following points:

- In the 6-month follow-up period, the mean total medical and drug costs were \$2008 for OROS-MPH, \$2169 for MAS XR, and \$2540 for atomoxetine-treated adults
- The generalized linear model for patient characteristics suggested that 6-month, risk-adjusted mean medical costs, excluding drug costs, for adults treated with OROS-MPH were \$142 less (10.4%, \$1220 vs \$1362) compared with MAS XR ( $P=0.02$ ) and \$132 less (9.8%, \$1220 vs \$1352) compared with atomoxetine ( $P=0.03$ ); risk-adjusted mean medical costs were not significantly different between MAS XR and atomoxetine
- The generalized linear model comparison of risk-adjusted total direct costs, including drug cost, was on average \$156 less (8.0%, \$1782 vs \$1938) for OROS-MPH compared with MAS XR ( $P=0.02$ ) and \$226 less (11.3%, \$1782 vs \$2008) compared with atomoxetine ( $P<0.001$ ); the risk-adjusted total direct costs were not significantly different between MAS XR and atomoxetine
- Two high-cost outliers (>99.96th percentile, 1 each for OROS-MPH and atomoxetine) accounted for \$47 (30%) of the \$156 cost difference between OROS-MPH and MAS XR and \$11 (5%) of the \$226 cost difference between OROS-MPH and atomoxetine, and the medical diagnoses for the highest cost claims for these 2 outlier patients were unrelated to ADHD

Thus, after adjusting for patient characteristics including comorbidities, adults treated with OROS-MPH had slightly lower medical and total medical and drug costs than those treated with MAS XR or atomoxetine over the 6-month period after drug therapy initiation. Approximately 30% of the cost difference

compared with MAS XR was attributable to 1 high-cost outlier with medical diagnoses for the highest cost claim that were unrelated to ADHD. It should be noted that this study examined costs and not other outcomes, such as improvement in symptoms or impairments.

The cost of treating ADHD rivals the cost of treating diabetes and surpasses the cost of treating depression, according to one comparison of service use and costs among adults with ADHD and adults with other chronic diseases.<sup>2</sup> The study analyzed a population that included 143,561 patients (58,017 with depression, 45,479 with diabetes, 33,272 with a seasonal allergy, and 6793 with ADHD). Pharmacy costs were similar for the diabetes and ADHD groups, with the ADHD group spending more on psychotropic drugs than the depression group [Table 2].

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## Case study

Jack is a 33-year-old male stock broker. He has a prior history of marijuana use; he stopped a month ago at the insistence of his girlfriend. He used it to help him “slow down and turn off” and get to sleep at night. He states that at work he cannot follow through with clients and complete orders. He reports that he is impulsive and restless at home. His girlfriend complains about his not listening to her.

His Adult ADHD Self-Report Scale (ASRS) v1.1 symptom checklist is positive for 8 of 9 inattentive symptoms (eg, How often do you have trouble wrapping up the final details of a project once the challenging parts have been done?) and 7 of 9 hyperactive impulsive symptoms (eg, How often do you interrupt others when they are busy?). He states that he had problems with inattention

**Table 2.**  
**Adjusted 12-Month Mean Prescription Drug Costs Among Patients in a Large Managed Care Plan, by Mutually Exclusive Groups<sup>2</sup>**

Type of Cost	ADHD	Depression	Diabetes	Seasonal Allergy	Group Difference			
					1	2	3	4
Psychotropic pharmacy cost	\$549	\$450	\$95	\$122	A	B	D	C
Other pharmacy cost	\$951	\$931	\$1,441	\$692	B	B	A	C
Total pharmacy cost	\$1500	\$1380	\$1536	\$814	A	B	A	C

Each cohort is represented by a group number: group 1: ADHD; group 2: depression; group 3: diabetes; group 4: seasonal allergy. The letters are assigned in order of size of the mean value; A is the largest mean value and D is the lowest. For cohorts with the same letter, no significant difference in means was observed, whereas different letters indicate a significant difference ( $P<.05$  level of significance).

and talking out of turn in elementary school. He was a poor student and was always perceived as an underachiever.

He was never evaluated for ADHD as a child. His symptoms increased in college where he “barely got by.” He did all of his work at the last minute; his classes “bored” him. After graduation, he became interested in stock brokering and got a job in that field. However, his work difficulties increased when he inherited a large number of clients from another broker who left the firm; he is having trouble managing all of them.

He tried a friend’s prescription of mixed amphetamine salts (MAS; Adderall) in college when he needed to study for tests and found it helped him remember what he had read. He continued to score this drug regularly in college.

He has no prior psychiatric history, no active medical problems. He has no history of depression or mania, no history of heart murmur, or family history of sudden or early cardiac death.

His diagnosis is ADHD, combined type. The plan is for urine toxicology test with regular follow-ups (these have been negative) and possible psychostimulant trial. Given recent American AHA guidelines, the patient received an ECG, which was normal.

Although the patient was requesting a trial of MAS immediate release (MAS IR), given his prior history of substance use and his need for treatment throughout the day, he was started on the prodrug lisdexamfetamine (LDX) 30 mg/day, with regular follow-up of urine testing and monitoring of sleep pattern. He experienced no side effects associated with LDX such as hypotension or palpitations. He was also referred for cognitive behavior therapy for organizational issues and substance use.

Jack’s ADHD symptoms improved on LDX 30 mg/day, and continued to improve as he was titrated over several weeks to a final dose of 70 mg/day. He reports improved functioning at work and home; his girlfriend corroborates improvement. His sleep is actually improved on LDX as ADHD symptoms were under control in the later hours of the day.

#### Key points of this case:

1. An ECG, as per AHA guidelines, was performed prior to initiation of a stimulant
2. The successful use of a stimulant was observed in a patient with a history of recent abstinence of substance abuse, along with substance counseling
3. Considering this patient’s past substance abuse problems, the use of LDX was safer and longer lasting than that of MAS IR
4. Sleep difficulties may be secondary to ADHD symptoms, monitoring them could reveal that they are improved with pharmacotherapy of ADHD symptoms

## The methylphenidate patch: when to wear it and what to do about skin reactions

The MPH transdermal patch has been an important therapy option for children who have ADHD and who are unwilling or unable to swallow oral ADHD medications. When compared with OROS-MPH and placebo, the methylphenidate transdermal

system (MTS) was as efficacious as the OROS system and superior to the placebo control ( $P < 0.001$ ).<sup>1</sup>

The patch is efficacious when worn for a 9-hour period. But which 9-hour span is suitable for the busy child who has a full school and after-school schedule? Wilens and colleagues performed a trial to determine the efficacy, duration of action, and safety of the MTS worn for variable times by children ages 6 to 12, who are diagnosed with ADHD.<sup>2</sup> The MPH dose was optimized over a 5-week period using 10-, 15-, 20-, or 30-mg patches worn for 9 hours. The efficacy of wear times at 2 time points, 4 and 6 hours, was then assessed in an analog classroom setting during a randomized, placebo-controlled, double-blind, 3-way crossover phase. The main efficacy measures were the Swanson, Kotkin, Agler, M-Flynn, and Pelham Rating Scale (SKAMP) department scale and the Permanent Product Measure of Performance math test (PERMP). All of the efficacy measures indicated that 4- and 6-hour wear times improved ADHD symptoms and that medication effects on the SKAMP and PERMP decreased between 2 and 4 hours after patch removal. The majority of adverse events were transient and mild to moderate in severity. These findings suggest that the duration of medication effect is related to the wear time of the patch and may be tailored to accommodate the schedules of patients. If the patch is placed too early in the morning (eg, 5:00 AM), the child will only have coverage until 2:00 PM, which may not protect from ADHD symptoms throughout the entire school day. That history test being given at 3:00 PM may end in disaster.

Also, skin irritation is a potential complication of MTS therapy in a small number of cases, although the manufacturers of the patch say that dermatological reactions can be minimized by using the system as directed, that is, applied to alternate hips below the belt line.<sup>3</sup> While cutaneous reactions may occur with any formulation of medication, they are more likely with transdermal administration. Warsaw and cohorts reported on a 2007 meeting of child psychiatrists, pediatricians, developmental pediatricians, and pediatric neurologists who treat ADHD and have had experience with MTS who convened to discuss cutaneous reactions in relation to its use.<sup>4</sup> Their consensus was that mild-to-moderate erythema is a common cutaneous effect with MTS use, and is generally not a cause for discontinuation if seen as an isolated case. Irritant contact dermatitis is relatively common and can be minimized and treated by alternating patch application sites, moisturizing, gentle skin care using mild soaps, and applying topical corticosteroids at the previous patch sites if needed. Allergic contact dermatitis and allergic contact urticaria are rare when MTS is worn as directed. MTS should be discontinued if allergic contact dermatitis is suspected.

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## Journal reviews

### Atomoxetine has some effect on drinking behavior in recently abstinent ADHD adults with comorbid alcohol use disorder

Adults with ADHD have higher rates of substance abuse disorders than their non-ADHD peers.<sup>1</sup> A new study sought to determine whether the nonstimulant atomoxetine was superior to placebo in improving ADHD and alcohol abuse in recently abstinent adults with ADHD and comorbid alcohol use disorder.<sup>2</sup> Participants received atomoxetine (25–100mg daily) or placebo for 12 weeks. ADHD symptoms were assessed using ADHD Investigator Symptom Rating Scale (AISRS) total score. Subjects who completed the 12-week, double-blind study received either atomoxetine (n=32) or placebo (n=48). The results showed that ADHD symptoms were significantly improved in the atomoxetine cohort compared to placebo (AISRS total score mean: atomoxetine: -13.63,  $P<0.001$ ; placebo: -8.31,  $P<0.001$ , difference:  $P=0.007$ ; effect size=0.48). No significant differences between treatment groups occurred in time-to-relapse of heavy drinking ( $P=0.93$ ). However, cumulative heavy drinking days were reduced 26% in atomoxetine-treated subjects vs placebo ( $P=0.023$ ). Thus, this study of atomoxetine in adults with ADHD and comorbid alcohol use disorder demonstrates clinically significant ADHD improvement, albeit conflicting effects on drinking behavior.

### Finger lengths of boys, but not girls, associated with ADHD

ADHD can present differently according to gender. But symptomatology aside, whether a child has ADHD may come down to finger length, at least for males. Studies have shown that males with autism have a relatively shorter index finger (2D) compared with their ring finger (4D).<sup>3</sup> Thus, it has been presumed that the 2D:4D ratio is associated with fetal testosterone levels and that high fetal testosterone levels could play a role in the etiology of autism. A recent study examined whether an association existed between finger-length ratios (specifically, 2D:4D) and ADHD in a well-characterized, clinically diagnosed, community-recruited sample of 113 boys and girls with ADHD and 137 non-ADHD comparison children.<sup>4</sup> An analysis of the data showed that right-hand digit ratios showed significant mean differences by gender, as well as associations with ADHD diagnosis. Boys with ADHD had more masculinized digit ratios than control-group boys. More masculine right 2D:4D and 3D:4D ratios were correlated with parent- and teacher-rated inattentive and hyperactive-impulsive symptoms in boys, but not in girls. Masculinized finger-length ratios were associated with hyperactive-impulsive and oppositional-defiant symptoms, but associations were largest with symptoms of inattention. The researchers concluded that prenatal, organizational effects of gonadal hormones may play a role in the development of ADHD and may, in part, explain gender differences in the prevalence rates of this disorder.

### Adult ADHD remains a significantly impairing condition among American workers

ADHD is a common and costly workplace condition. In a 2005 study by Kessler and colleagues in which 4.2% of 3,198 American workers surveyed had ADHD, the condition was associated with 35.0 days of annual lost work performance, with higher associations among blue collar (55.8 days) than professional (12.2 days), technical (19.8 days), or service (32.6 days) workers.<sup>5</sup> These statistics represent 120 million days of annual lost work in the U.S. labor force, equivalent to \$19.5 billion lost human capital. In 2008, Kessler et al performed a survey-driven study that included over 8,500 employees of a large manufacturing firm to assess the prevalence and correlates of adult ADHD.<sup>6</sup> In this study, ADHD was assessed with the World Health Organization (WHO) Adult ADHD Self-Report Scale (ASRS). Absentee days due to sickness, as well as work performance and workplace accidents/injuries were assessed with the WHO Health and Work Performance Questionnaire.

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## Posttest

Please select only one answer for each question. Circle the letter corresponding to the correct answer on the answer form on the next page.

- Abnormal attention scores have been reported in what percentage of children with cardiac abnormalities?
  - 2%
  - 20%
  - 45%
  - 80%
- According to a recent pilot study, what percentage of otherwise healthy school-aged children had potentially serious undiagnosed cardiac conditions identified by an ECG?
  - 2%
  - 20%
  - 45%
  - 80%
- According to the AHA, if a patient has both a cardiac problem and ADHD, how should the clinician proceed with treatment?
  - Treat the cardiac problem first, then the ADHD
  - Treat ADHD first, then the cardiac problem
  - Treat both conditions simultaneously
  - Patients with cardiac problems should never be treated for ADHD using stimulant drugs; thus, treat only the cardiac problem
- In a study that compared the therapeutic costs of OROS-MPH, MAS XR, or atomoxetine, which was the most economical at 6 months?
  - OROS-MPH
  - MAS XR
  - Atomoxetine
  - All were comparable in cost
- In a study that analyzed the costs of 4 chronic conditions, which of the following had the highest psychotropic drug costs?
  - Depression
  - ADHD
  - Diabetes
  - Seasonal allergy
- To gain optimal control of ADHD symptoms, the MPH transdermal patch should be worn:
  - 6 hours on, 6 hours off every 12 hours
  - 9 hours every 24 hours
  - 12 hours every 24 hours
  - 24 hours a day
- Which of the following dermatological reactions warrant discontinuation of the MTS?
  - Mild-to-moderate erythema
  - Irritant contact dermatitis
  - Allergic contact dermatitis
  - All of the above
- What is not true about the study that assessed atomoxetine in ADHD patients who abused alcohol?
  - ADHD symptoms were significantly improved in the atomoxetine cohort compared to placebo
  - Significant differences were observed between treatment groups in time-to-relapse of heavy drinking
  - Cumulative heavy drinking days were more reduced in atomoxetine-treated subjects than placebo
  - B and C
- In a study that examined whether an association exists between finger-length ratios and ADHD, masculinized finger-length ratios were most frequently associated with:
  - Hyperactive symptoms
  - Impulsive symptoms
  - Oppositional-defiant symptoms
  - Inattentive symptoms
- In a study that analyzed annual lost work performance among American workers with ADHD, which group incurred the greatest frequency of annual lost work performance?
  - Professional workers
  - Service workers
  - Technical workers
  - Blue collar workers

## Adult ADHD: Issues and Answers

Successful completion of the posttest examination (at least 70% correct) and activity evaluation is required to earn a maximum of .75 AMA PRA Category I Credits™. Statements of Credit will be awarded upon successful completion of the posttest and evaluation.

To receive a certificate of credit, please mail or fax this completed form to:  
 Medical Education Resources, Inc.  
 Attention: Certificate Processing  
 1500 West Canal Court  
 Littleton, CO 80120  
 Fax: (303) 798-5731

There is no fee for certificate processing.

Posttest Answer Form	
(Circle the correct answer to each question)	
1. A B C D	6. A B C D
2. A B C D	7. A B C D
3. A B C D	8. A B C D
4. A B C D	9. A B C D
5. A B C D	10. A B C D

To receive credit, you must answer 7 of the 10 posttest questions correctly, complete all forms, and submit them by July 31, 2009.

### Registration for Credit (please print)

First Name: \_\_\_\_\_

Last Name: \_\_\_\_\_

Degree: \_\_\_\_\_

Specialty: \_\_\_\_\_

Street Address (your certificate will be sent here):  
 \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

ZIP: \_\_\_\_\_

State/License #: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

I certify that I have completed this CME activity. The actual amount of time I spent on this activity was \_\_\_\_\_ minutes.

Signature \_\_\_\_\_ Date \_\_\_\_\_

### Activity Evaluation Form

Please circle the appropriate rating in answer to the questions that follow:

- How would you rate the content of this CME activity?  
 Poor 1 2 3 4 5 Outstanding
  - How relevant was the content of this activity to your practice?  
 Not relevant at all 1 2 3 4 5 Very relevant
  - To what degree were you able to meet each of the learning objectives of the activity? Please respond to each learning objective listed below:
    - Recognize the potential for cardiac abnormalities in the ADHD population, the potential consequences of initiating stimulant-based therapy, and the importance of guidelines for managing ADHD in patients with cardiac abnormalities  
 Poor 1 2 3 4 5 Outstanding
    - Identify cost-effective treatment options for ADHD patients  
 Poor 1 2 3 4 5 Outstanding
    - Develop a strategy for applying the methylphenidate transdermal patch to maximize benefit to the patient and prevent cutaneous reactions  
 Poor 1 2 3 4 5 Outstanding
    - Relate recent research pertinent to atomoxetine therapy and alcohol abuse and stimulant diversion among young adults and the relationship between finger length ratios and ADHD  
 Poor 1 2 3 4 5 Outstanding
  - Based on your knowledge and experiences, the level of the activity was:  
 Basic Appropriate Complex
  - How would you rate the activity overall?  
 Poor 1 2 3 4 5 Outstanding
  - Do you believe this activity was fair, balanced, and free of commercial bias?
    - Yes No
    - If No, please state the reason:  
 \_\_\_\_\_  
 \_\_\_\_\_
  - How much did this activity enforce your current clinical opinions?  
 Not at all 1 2 3 4 5 A lot
  - How much new information did you find in this activity?  
 None 1 2 3 4 5 A lot
  - As a result of this activity, will you alter your practice?  
 Yes No
  - If Yes, please describe any change(s) you plan to make:  
 \_\_\_\_\_  
 \_\_\_\_\_
  - How committed are you to making these changes?  
 Not at all committed 1 2 3 4 5 Very committed
  - If No, why not? \_\_\_\_\_
7. Additional comments about this activity?  
 \_\_\_\_\_  
 \_\_\_\_\_
8. Do you feel future activities on this subject matter are necessary and/or important to your practice?  
 Yes No
9. Please list any other topics that would be of interest to you for future educational activities.  
 \_\_\_\_\_  
 \_\_\_\_\_



## Adult ADHD: Issues and Answers

The information in this publication does not necessarily reflect the opinions of the publisher or grantor.


### View this newsletter online!

We are pleased to also offer this issue of **Adult ADHD: Issues and Answers** online through the Adult ADHD Program at NYU School of Medicine Department of Psychiatry Web site at:

<http://www.med.nyu.edu/psych/psychiatrist/adultadhdnewsletter.html>

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