Cardiac Screening in Pediatric ADHD Patients

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Attention-Deficit/Hyperactivity Disorder (ADHD) is a childhood neurodevelopmental disorder which can result in inattentiveness, hyperactivity and/or impulsivity. Data from the Centers for Disease Control (CDC) in 2016 revealed that close to 10% of US children have been diagnosed with ADHD at one point in their lives, with over half of them on medications for management of the disorder. Stimulants are the initial choice in medical therapy for ADHD, given their historical effectiveness and safety profile.

Over at least the last decade, there have been multiple advisories, opinions and research on the cardiovascular risk of stimulants, particularly in children. In February 2006, an FDA advisory committee voted to recommend placement of a “black box” warning about possible cardiovascular risks on the labels of stimulants. This represented the strongest warning that the FDA could mandate regarding the risk profile of a medication. However, by March 2006, another advisory committee had recommended not proceeding in this fashion, which the FDA ultimately adopted.

These two conflicting advisories resulted in many discussions among physicians and in the popular press, about the possible risks of stimulants on cardiovascular health. In April 2008, the American Heart Association (AHA) released a guideline on cardiovascular monitoring in pediatric ADHD patients. In addition to a thorough history and exam, the AHA concluded that an electrocardiogram (EKG) may be useful in identifying patients with occult cardiac disease. Not long after, in May 2008, the AHA and the American Academy of Pediatrics (AAP) released a joint clarification, which mentioned that it was “reasonable” to consider an EKG based on history and physical exam, but it was not mandatory.

Multiple cohort studies in pediatric patients without heart disease have since failed to demonstrate a significant difference in cardiac-related events. There remains insufficient evidence to suggest an increased risk of sudden death or adverse cardiac event in those patients on stimulants, when compared to the general pediatric population at large.

So in our daily pediatric practices, what are the key points of these varying opinions as we encounter our patients with ADHD? The key points from the studies mentioned above include:

- Routine EKG screening is not indicated in patients receiving treatment for ADHD unless concerns arise during clinical evaluation.
- If an EKG is performed, it should be interpreted by a pediatric cardiologist or someone with experience in reading pediatric EKGs.
- It is important to investigate historical factors such as cardiovascular-related symptoms, family history of sudden/unexplained death, heritable arrhythmias, cardiomyopathies and collagen vascular disorders (Marfan).
- While on therapy, blood pressure and pulse monitoring is reasonable with continual inquiry into cardiac-related symptoms (palpitations, chest pain, exercise intolerance, lightheadedness or syncope).
- In patients with structural heart disease, consultation with a pediatric cardiologist is recommended.
Governor Newsom’s Proposed Budget for 2019-2020
On January 10, Governor Newsom released his proposed budget for the new state fiscal year that will begin July 1, 2019. Items of interest to Valley Children’s include the following:

• $30.5 million to expand home visiting programs for high risk infants, including the California Department of Public Health’s Black Infant Health Program.

• $78.9 million to provide home visiting services to an anticipated 16,000 eligible CalWORKs recipients. Cal WORKs is California’s public assistance program for low income families and children.

• $260 million to expand Medi-Cal coverage to undocumented young adults through age 25. California already provides Medi-Cal coverage to undocumented children.

• $50 million to increase training opportunities for mental health providers.

The Governor’s January release represents the first of many steps that must occur before final adoption of a budget in June. Valley Children’s will be engaged throughout the process to ensure maximum support for children and families.

PREEMIE Reauthorization Act of 2018
As noted in the November 2018 issue of CCP, one of Valley Children’s federal policy priorities for 2018 not yet addressed was enactment of legislation known as the PREEMIE Reauthorization Act of 2018. First enacted in 2006, the PREEMIE Act funds a number of important efforts focused on premature birth prevention, including research and data collection activities at the federal level and support for state level programs and interventions. After significant outreach by organizations throughout the country, including Valley Children’s, Congress passed and President Trump signed the legislation into law in December.

For questions or more information on these and other issues, feel free to contact Tim Curley at 559-353-8610 or TCurley@valleychildrens.org

Medical Staff News
The following pediatric specialists recently joined Valley Children’s:

Hospitalists
Laura Maselli, MD

Internal Medicine
Erin Newman, MD

Pediatric Medicine
& Rehab
John Luce, DO

Pediatric Surgery
Erik Barthel, MD, PhD

Primary Care
Padmaja Kankar, MD

CME Registration
We are pleased to announce a new and enhanced CME registration system. This new system will allow you to create a profile so you can save your information for an easier registration process. You will also be able to check into events you have attended, view presentations, complete evaluations online and print certificates on demand. The system will also allow you to generate a transcript of all the live and online events you have attended, in addition to loading outside credit information for non-Valley Children’s events you have attended.

Questions about registering? Contact us at programs@valleychildrens.org or 559-353-6621.