



Central California Pediatrics

Specialty information for physicians who treat children and expectant mothers.



MAY 2015



Pediatric Heart Murmurs

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Heart murmurs are commonly referred to pediatric cardiologists. Murmurs are noted in up to 77% of neonatal patients and in up to 70% of individuals participating in a pre-athletic evaluation. In fact, a murmur is heard in most children at one or more of their well-child exams. While most heart murmurs turn out to be innocent, or functional, it is important to differentiate murmurs caused by heart disease.

What is a heart murmur?

Heart murmurs are sounds due to turbulent flow of blood that are audible with a stethoscope. Such turbulence often can be detected even in normal cardiac anatomy. Narrow or leaking vessels or valves, or abnormal holes within the heart, may cause murmurs.

Evaluation

Comprehensive auscultation is the first step in evaluating a heart murmur, including characterizing important features such as:

- timing (systolic, diastolic, continuous)
- intensity (typically on a scale of 1 to 6)
- location and quality (harsh, blowing, musical, vibratory)

Murmurs may change upon the position of the patient. If possible, perform auscultation while the patient is supine as well as upright.

Absence of a cardiac murmur does not exclude serious congenital heart disease, especially in neonates. For example, murmurs may be minimal in significant congenital heart disease such as hypoplastic left heart syndrome, pulmonary atresia, coarctation of the aorta, transposition of the great vessels, and large intracardiac defects (such as a complete atrioventricular canal), especially in the first weeks of life while pulmonary vascular resistance is still elevated.

There also may be no murmur when the heart is weakened, as in myocarditis. Thus, it is important to always perform a thorough cardiac physical exam, incorporating an assessment of arm and leg pulses, perfusion, precordial activity, respiratory rate and depth, and in the neonate pre-discharge pulse oximetry screening.

When to refer

When a concerning feature is noted, the next step usually is an echocardiogram or referral to a pediatric cardiologist. An echocardiogram can evaluate the heart structure and blood flow through the heart. This excellent tool helps identify abnormalities in the heart muscle and valves, and can serve as a supportive test. If a pathologic murmur is established, referral to a pediatric cardiologist is important to determine the severity of heart disease, prognosis and treatment options.

Dr. Aquino is a member of the board-certified physician staff at our Willson Heart Center, including 10 pediatric cardiologists and three pediatric cardiothoracic surgeons providing comprehensive care for children ages 0 to 20.

Specialty Care Centers

Olivewood Specialty Care Center Merced - 209.726.0199
McHenry Specialty Care Center Modesto - 209.572.3880
34th Street Specialty Care Center Bakersfield - 559.353.8800

Valley Children's Physician Liaison

David Chuhlantseff is available to answer questions
or assist you at (559) 353-7229
or physicianrelations@valleychildrens.org

Children's Advocacy



Tim Curley
Director of Community
and Government Relations,
Valley Children's Healthcare

Below is an update on key items of interest to physicians as of May 18, 2015.

State Budget 2016

On May 14, Gov. Brown released his revised draft budget for the state fiscal year beginning July 1, 2015. Over the coming weeks, the governor will work with legislators to craft a final budget deal in time for a vote by June 15, the Constitutional deadline for the legislature to pass and send a budget to the governor.

Despite additional state revenue (\$6.7 billion above the projections in the January draft budget), the governor's budget contains no major restorations of previous health service reductions beyond issues included in January's draft budget. The budget also does not include funding to continue the ACA Medi-Cal physician rate increase that ended Dec. 31, 2014. The bulk of the additional state revenue is earmarked for Proposition 98 (education) and Proposition 2 (the "rainy day fund").

State Legislation

Key legislation continues to move through the state legislature, including Assembly Bill 366 and Senate Bill 243 that would increase Medi-Cal rates for physicians and hospital services, Senate Bill 277 that would remove the personal exemption as it relates to childhood immunizations, and Senate Bill 586 that would require the state to contract with Kids Integrated Delivery Systems to manage and coordinate the care for children with CCS and Medi-Cal. Valley Children's is actively supporting these bills.

California Children's Services (CCS) Program

The CCS program's carve-out from Medi-Cal managed care expires Jan. 1, 2016. In anticipation of the sunset, the state Department of Health Care Services (DHCS) has formed a CCS Regional Stakeholder Advisory Board (RSAB) to advise DHCS regarding redesign of the CCS program. Valley Children's is a member of the RSAB. The next RSAB meeting is scheduled for Friday, May 29, and will be convened via conference call from 10 a.m. to noon. The public can call into the meeting by dialing (888) 921-8686 and entering 961 640 6431 at the prompt. DHCS hopes to have a final model agreed upon by late summer or early fall 2015.

For the latest information on these and other issues, visit Valley Children's *Children's Advocacy Network* at www.ValleyChildrens.org/CAN, or contact Tim Curley at 559.353.8610 or TCurley@valleychildrens.org.

Medical Staff News

The following pediatric specialists recently joined Valley Children's:

Anesthesiology

Monique Cadogan, MD

Hospitalists

Patrick Burke, MD

Nika Howell, MD

Erica Veeh, MD

Neurosurgery

Ashley Tian, MD

Orthopaedic Surgery

David Ebenezer, MD