



Central California Pediatrics

Specialty information for physicians who treat children and expectant mothers.



Surgical Care for Congenital Heart Disease

February 2016

Malcolm MacDonald, MD
Pediatric cardiothoracic surgeon

Cardiovascular malformations requiring surgical intervention to prevent morbidity or death occur in approximately two in 1,000 newborns. A wide variety of anomalies results in diverse presentations and an enormous range of possible operations that must be tailored to the individual child. Successful management of children with congenital cardiac anomalies has resulted in an ever-increasing number of older and adult patients with congenital heart disease requiring interventions.

Surgical interventions include complete repairs when possible, and palliative procedures to provide adequate circulation until either a reparative operation can be performed or further palliation is necessary. Surgical management is dictated by whether there is inadequate or excessive pulmonary blood flow, obstruction to systemic blood flow, or significant left-to-right or right-to-left shunt. Almost always a normalized, two-ventricle separated circulation is preferable to a single-ventricle circulation. Native tissue repairs are preferable to prosthetic materials in neonates and children. Patients commonly require multiple operations and staged care, often into adulthood.

Children born without two well-developed ventricles are among the most difficult to manage. Treatment requires early recognition and care. Without intervention, progression to death is inevitable. Single-ventricle management provides balanced circulation during the

transition from fetal to neonatal hemodynamics, and balanced pulmonary and systemic blood flow. Long-term therapy aims at restoring a separated circulation and ultimately providing the best quality of life for the child and family. These patients always require multiple operations involving a team of caregivers.

Many anatomic lesions can be classified as single ventricle, and they share common functional characteristics. Physiologically, these lesions result in mixing the systemic and pulmonary venous circulations in a single chamber. Occasionally, the ventricles are surgically separated to create a two-ventricle circulation. More commonly, medical and surgical management require multiple interventions to provide a separated single-ventricle circulation, most often by Fontan palliation. One of the most complex of these is hypoplastic left heart syndrome, which typically is managed by a neonatal Norwood operation, a Glenn operation at 3 to 6 months, and a Fontan operation at 3 to 5 years of age.

Valley Children's has provided cardiac surgical care since soon after the first open-heart surgery in 1952 – the longest history in the Central Valley. Currently, we offer all types of simple and complex repairs and palliations to patients with congenital heart disease who are in need.

Valley Children's board-certified physician staff includes 11 pediatric cardiologists and three pediatric cardiothoracic surgeons.

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 - 661.843.8980
Akers Specialty Care Center Visalia - 559.302.1245

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 Feb. 10, 2016.

2016-2017 State Budget

On Jan. 7, Gov. Jerry Brown released an overview of his proposed budget for the new fiscal year beginning July 1, 2016. The budget proposal does not include any major programmatic or funding changes to healthcare programs, including Medi-Cal or the California Children's Services program, other than the two items listed below.

Expansion of Full-Scope Medi-Cal to Undocumented Children: The budget includes \$182 million to provide full-scope benefits to 170,000 children statewide. Coverage is scheduled to begin May 1, 2016.

Managed Care Organization (MCO) Tax: The budget includes a proposal to establish a new MCO tax. In 2015, the federal government advised the state that the current MCO tax does not meet federal requirements. Since the state budget receives roughly \$1 billion annually from the current MCO tax, creating a new tax that both passes federal muster and is amenable to the health plans has been a major political struggle. The Brown administration and health plans continue to try to negotiate a deal. Failure to do so could lead to reductions in the Medi-Cal budget for the new year.

Children's Hospital Graduate Medical Education (CHGME)

There have been two recent, positive developments regarding federal funding for CHGME. First, on Dec. 18, 2015, President Barack Obama signed into law a \$1.1 trillion spending bill for the remainder of the current federal fiscal year (thru Sept. 30, 2016) that included \$295 million in CHGME funding, an increase of \$30 million from federal fiscal year 2015.

Then, on Feb. 9, 2016, President Obama released his proposed budget for federal fiscal year 2017 that included a provision to convert CHGME from a program funded through the discretionary appropriations process, thus requiring continuous advocacy, to a program that receives mandatory funding annually. This marks a positive development and a major departure from previous recommendations on CHGME funding.

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:

Gastroenterology

Minesh Patel, DO

Hospitalists

Julie Celeberti, MD (Turlock)

Lindsey Demetral, DO

Laura Maitoza, MD

Imaging

Trevor Davis, DO

(interventional radiologist)

Ceayee Mak, MD

Infectious Diseases

M. Nael Mhaissen, MD

Neurology

Muhammad Salim, MD

(epileptologist)

Otolaryngology

Rachelle Wareham, MD

Qiu Zhong, MD

Orthopaedic Surgery

Jill Friebele, MD

The Willson Heart Center

Lakshmi Nagaraju, MD

Valley Children's Physician Liaison

For questions or assistance,
please call 559.474.2707 or
physicianrelations@valleychildrens.org