



Central California Pediatrics

Specialty information for physicians who treat children and expectant mothers.



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Pectus Deformities: Referral and Treatment

Douglas Tamura, MD
Pediatric Surgeon

Pectus deformities (excavatum/carinatum) are due to abnormal growth of anterior chest wall components. They are more common in boys and usually become worse during the adolescent growth spurt. Severe cases can eventually interfere with heart and lung function. However, mild cases can make children feel self-conscious. Both types of pectus deformities have treatment options.

For most children, the only symptom of a pectus deformity is an abnormal configuration in the sternum. There is a wide range in severity. During adolescence the deformity worsens and other symptoms may include decreased exercise tolerance, wheezing, chest pain, shortness of breath, a heart murmur or fatigue. The cause is unknown but runs in some families. It appears to be due to abnormal growth of costochondral segment of adjacent ribs as they join the sternum. The deformity may be visible early in life. Primary care physicians should explain potential complications. Most of these deformities will remain subtle and not worsen. During annual checkups, increased deformity or other symptoms should be noted. The preteen years are most important. Often this is when parents don't follow up because the child is usually otherwise healthy. Close and constant observation is key.

Referral and treatment options

Early referral to a pediatric surgeon is best. Timing of treatment to correct the condition can be discussed with the

specialist, who will usually order imaging studies to assess the extent of the deformity. A team approach involving pediatric cardiology, pediatric pulmonology and other subspecialties produces optimal results.

Excavatum ("funnel chest"):

- Ideal age to surgically correct the abnormality is between 10 and 14 years old.
- Preferred approach is the "Nuss" procedure, a minimally invasive technique that inserts one or more concave steel bars into the chest underneath the sternum. The bar usually remains two to three years until the bones solidify and is removed through outpatient surgery.
- Hospitalization is about four or five days.

Carinatum ("pigeon chest"):

- Ideal age to treat is adolescence.
- Preferred approach is external bracing. A customized chest-wall brace applies direct pressure to the protruding area.
- Willingness to wear the brace is essential. The device is easily hidden under clothing and must be worn 14-24 hours a day, depending on the severity of the deformity.
- Surgical repair is an option and would require about a four-day hospital stay, but external bracing has produced excellent outcomes.

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

Valley Children's Healthcare
9300 Valley Children's Place
Madera, CA 93636-8762

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Children's Advocacy



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

Major recent activity in the world of advocacy and public policy was, of course, the Nov. 9 general election. Below is a summary of some of the key results impacting children's healthcare.

Ballot Measures

- **Proposition 52**, the Medi-Cal Hospital Fee initiative, passed with close to 70% of votes in support. Prop 52 makes permanent existing state law that imposes fees on hospitals to obtain additional federal Medicaid funding for both the state of California and hospitals.
- **Proposition 55**, the income tax extension, passed with over 62% of votes in support. A majority of Prop 55 revenues will be used to increase funding for K-12 education and community colleges, and to increase state budget reserves and debt payments. Prop 55, however, does include additional funding (\$0-\$2 billion per year) for the Medi-Cal program in years when state revenues exceed state education funding requirements. The initiative language states that the extra Medi-Cal funding "shall be used only for critical, emergency, acute, and preventive care services to children and their families and to health plans or others that manage the provision of health care for Medi-Cal."

- **Proposition 56**, which raises the tobacco tax by \$2 per pack, passed with over 63% of votes in support. Prop 56 revenues will be used to increase funding for tobacco prevention and control programs, tobacco research, physician training, and state health programs including Medi-Cal. Regarding the latter, it is estimated that Prop 56 will generate about \$1 billion in additional funding for state health programs that, according to the initiative language, "shall be used to increase funding for existing health care programs and services by providing improved payments, for all health care, treatment, and services."

Valley Children's will monitor implementation of these ballot measures to ensure that the healthcare provisions benefit as much as possible children and the providers who care for them.

Legislative Races

In Central California, there were no major surprises or upsets in legislative races for the state Assembly, state Senate or U.S. Congress.

Regarding the presidential election, Valley Children's is evaluating the impact of Donald Trump's election on federal healthcare policy and funding and will get back to you with more information soon.

Please contact **Tim Curley at 559-353-8610 or tcurley@valleychildrens.org** for questions or comments.

Valley Children's Physician Liaison

For questions or assistance, please call 559-474-2707 or physicianrelations@valleychildrens.org