Thyroid nodules are common in adults but rare in children, affecting fewer than six children in 1 million in the United States each year. Despite relatively small numbers, the incidence is increasing. While most nodules in the thyroid gland are benign, they are significantly more likely to be malignant in children (20 percent in many studies) than in adults (5 percent). Although thyroid cancer is usually detected at a more advanced stage in children than in adults, and more likely to spread and recur, the prognosis for children who receive early and appropriate treatment is excellent. Because thyroid nodules in children are often too small to feel or cause symptoms, children at risk of thyroid cancer should be evaluated at a high-volume center with expertise in advanced diagnostic and treatment techniques.

**Avoiding unnecessary surgeries**

UCLA’s Pediatric Thyroid Program is one of the few centers in Southern California that specialize in the diagnosis, treatment and care of children with thyroid nodules, which are four times more likely to be cancerous in children than in adults.

UCLA’s endocrinologists are highly experienced in the use of an advanced fine-needle biopsy technique that uses ultrasound guidance to identify tiny nodules that may otherwise be undetectable. More precise and accurate than standard biopsy techniques, ultrasound-guided biopsies help avoid unnecessary surgeries and potential complications such as injury to the vocal cords, surgical scarring and the need for lifelong hormone replacement therapy.

“Not long ago, thyroid nodules were routinely taken out, but you don’t want to do that unless you absolutely need to,” says Harvey K. Chiu, MD, head of the UCLA Pediatric Thyroid Program. “At UCLA, we provide a more careful evaluation that helps us identify nodules that should be removed and eliminate unnecessary surgeries for those thyroid nodules that are harmless.”

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UCLA's Pediatric Thyroid Program offers expert diagnostic, surgical and follow-up treatment to children with thyroid nodules, and comprehensive care for all types of thyroid disorders including thyroid cancer. Our pediatric endocrinologists have performed more than 200 fine needle biopsies under ultrasound guidance, a state-of-the-art technique that allows for greater precision and more accurate diagnosis of suspicious thyroid nodules. UCLA's specialists deliver excellent, child-centered care, using the most modern techniques, such as needleless devices to deliver local anesthesia for these biopsies. This outpatient procedure is designed to minimize discomfort so children can resume their activities the same day.

If pathologists detect cancer, UCLA is one of very few centers that offer radioactive iodine therapy to children, and can offer inpatient treatment in selected cases. When surgery is recommended, our highly skilled surgeons have access to the most advanced equipment and facilities at Mattel Children's Hospital UCLA, which is ranked among the best in the nation. UCLA's physicians are interested in such cutting-edge care as the potential use of genetic markers in detecting malignancies in pediatric thyroid cancer patients. While UCLA's Pediatric Thyroid Program is dedicated to the care of children from birth to age 21, the program's specialists are board-certified in both adult and pediatric endocrinology, providing children with high-quality thyroid care into adulthood.

Factors that increase the risk of thyroid cancer

Pediatric thyroid cancers are generally divided into papillary thyroid carcinoma and its follicular variant, follicular thyroid carcinoma and medullary thyroid carcinoma. While the causes of pediatric thyroid cancer are still under investigation, several factors are known to increase a child's risk: family history, rare genetic syndromes and exposure to high levels of medical or environmental radiation. Children who have been treated with radiation for other types of cancer — such as lymphoma — are also more likely to develop thyroid cancer and should undergo regular screenings for the disease.