For nearly a year, Hunter Cashatt, 14, suffered increasingly intense leg pain that left him unable to run or sleep through the night. It also robbed him of the chance to play sports – the center of his world in Beloit, Kan., population 3,800.

**Tumor inside the bone**

Hunter was eventually diagnosed with a pea-sized, benign tumor, an osteoid osteoma, inside his left shinbone. Parents Luke and Heather feared complex surgery and a lengthy recovery might be in store for Hunter. Or worse, a lifetime of chronic pain.

What if the boy who loved baseball, fishing and hunting could never again be physically active?

Seeking the best medical options, the Cashatts drove four hours from north central Kansas to see specialists at The University of Kansas Hospital – Indian Creek Campus in southern Johnson County.

Heather vividly recalls the first visit. “Doctors had told me Hunter’s tumor was benign, but what a relief it was to hear it from the real experts!”

**No surgery necessary**

What the Cashatts heard next felt like winning the lottery. Interventional radiology medical director Zachary Collins, MD, and his team planned to eliminate Hunter’s tumor through microwave ablation, a minimally invasive procedure. That meant no surgery. No overnight hospital stay. No lengthy recovery afterwards.

“Dr. Collins was very thorough in his explanation beforehand and really helped us understand what was going to be involved,” Heather said. “And during the procedure, he even took pictures to show Hunter exactly how it took place.”

**Most advanced technology**

Microwave ablation harnesses the same type of energy that heats leftovers. While the technology has been around for some time, Collins’ team used the NeuWave Medical microwave ablation system – an advanced, more powerful version not available elsewhere in the Kansas City area.

With Hunter under anesthesia, the team determined the tumor’s precise location with high-tech imaging equipment to see inside his body. Guided by the onscreen image, Collins inserted a needle probe through the bone and into the tumor’s core. Powerful microwave energy heated the probe tip to more than 200 degrees, destroying the tumor in about 2½ minutes.

**Pain-free within two days**

The incision in Hunter’s leg was about the size of a freckle. He went home the same day and was pain-free within about 48 hours.

“As interventional radiologists, we’re leading experts at image-guided procedures like this,” Collins said. “We’re specialists in treating cancerous and benign tumors throughout the body.”

Just turned 15 this summer, Hunter sports a new baseball uniform and an ear-to-ear grin, glad to be back in the game.
Radiologists among nation’s busiest – pioneering new procedures, treatments

Radiologists are the ultimate team players at The University of Kansas Hospital, providing advanced diagnostic imaging, innovative treatments and interventional procedures to patients across all medical departments.

The hospital has become a regional hub for radiology services, increasing the annual number of exams and procedures by nearly 95 percent in the past decade. There are 11 diagnostic imaging facilities across the Kansas City metro, compared to three in 2006. Diagnostic imaging includes X-rays, CT scans, MRIs, mammograms, ultrasounds, interventional and nuclear medicine.

Specialists mean better outcomes

“We have radiology subspecialists for every area of the body, from the brain to the abdomen and bones, as well as pediatric radiologists,” said Philip Johnson, MD, Radiology chair. “They read only those images. This degree of specialization and expertise translates to more accurate, decisive and detailed interpretations – and ultimately, improved care and better patient outcomes.”

Interventional radiology: top 1%

Diagnostic imaging is only part of the equation. Eight interventional radiologists perform more than 50 image-guided minimally invasive procedures a day at the hospital. This volume puts the interventional radiology (IR) program in the top 1 percent for number of patients served among major U.S. academic medical centers. Minimally invasive procedures can offer patients less risk, shorter recovery time and potentially better outcomes.

Treatment options offer hope

In an all-digital environment, radiologists use the latest imaging technologies to pioneer the newest treatments, often before these procedures are available elsewhere, Johnson noted. By collaborating with physicians across other disciplines, IR physicians develop more comprehensive treatment options for even the most challenging cases – offering hope where previously there was none.

“Technological advances are best for the patient when they travel on the heels of collaborative care,” Johnson said. “That’s the advantage we have here.”

The University of Kansas Hospital’s radiology program, by the numbers

94% Increase in number of radiology exams and procedures performed annually compared to a decade ago: 160,048 in 2004 vs. 311,059 in 2013

11 Number of imaging facilities in the Kansas City area, including the newest location at the Indian Creek Campus in southern Johnson County

300+ Number of different procedures our interventional radiologists perform, from routine procedures to lifesaving interventions

50+ Average number of procedures performed daily by the hospital’s eight interventional radiologists

1% The interventional radiology program’s top ranking for patient volume among University HealthSystem Consortium-member academic medical centers nationwide

Only breast radiologists interpret mammograms

At The University of Kansas Hospital, mammograms are interpreted only by breast imaging radiologists. Each physician specialist reads an average of 3,000 images a year, compared to only 240 required for American College of Radiology certification. This level of specialized experience helps breast radiologists spot abnormalities that otherwise might be missed.

The hospital was the first in Kansas to offer 3D digital mammography (tomosynthesis) – leading-edge diagnostic technology that can detect cancer at the very earliest stages. It is available at the Westwood Medical Pavilion in Westwood, Kan., and at our newest location:

The University of Kansas Hospital – Indian Creek Campus Breast Imaging
10720 Nall Ave.
Overland Park, KS 66211

Mammograms are also available at KU MedWest in Shawnee, Kan. Visit kumed.com/breastimaging, or call 913-588-1227 to schedule.

To learn more or find an imaging facility near you, visit kumed.com/radiology.