



# State-of-the-Art Imaging Services Close to Home

From sophisticated CT studies to leading-edge MRI scans, Orange Coast Memorial is at the forefront of a quiet revolution that's taken place in the field of radiology.

"The hospital's imaging technology is faster and more powerful than ever before, providing unprecedented views into the human body," says Richard Wasley, M.D., Service Chief of Radiology.

What does this mean for patients? Earlier this year, Shirley Collins learned firsthand how Orange Coast's imaging technology has changed the way medicine is practiced. In February, the 76-year-old Huntington Beach resident was undergoing a medical evaluation for dizziness. But one evening, the problem suddenly escalated, making it impossible for her to walk unless her husband Abraham supported her. Alarmed, he drove his ailing wife to the emergency room at Orange Coast Memorial.

"They didn't waste any time taking care of her," he says. Within minutes, Shirley was undergoing CT angiography to determine if she'd suffered a stroke. Due to Orange Coast Memorial's advanced CT scanner, the test took only 25 seconds, producing detailed pictures of Shirley's brain and carotid arteries.

"We were very, very happy with the care she received," says Abraham. Fortunately, the CT angiogram showed that Shirley hadn't suffered a stroke.

"Just a few years ago, invasive angiography was the only tool we had to evaluate the vessels inside the brain," says Dr. Wasley. "This test took up to three hours and required the patient to lie motionless from beginning to end."

Advanced CT scanners have made a huge difference. Not only do they provide clear, noninvasive pictures of the brain and other organs within a few seconds, but they can visualize the beating heart and its major vessels. In some cases, this means CT technology can take the place of other, more invasive ways to evaluate the heart.

In addition to CT scans, Orange Coast Memorial radiologists use a variety of other leading-edge technologies to see inside the body, including magnetic resonance imaging (MRI).

"Unlike the CT scanner, which uses X-ray radiation, MRI uses radiofrequency waves and magnetic fields," says Dr. Wasley. MRI technology is valuable in evaluating blood flow, diagnosing strokes and detecting tumors that affect the brain, bones and spinal cord. It's also considered very important for breast cancer detection in high-risk women.



Another technological marvel at Orange Coast Memorial is the positron emission tomography (PET) scanner. This machine detects the presence of cancer on a cellular level and determines how rapidly the disease is spreading. So precise is PET technology that it can distinguish between benign or malignant tumors and evaluate the effect of cancer therapy on individual cells.

"When combined with CT scans, the PET scanner identifies growing cancer cells, while the CT scanner captures the precise size and shape of the growths," says Dr. Wasley. "Together, these images provide unparalleled accuracy in the diagnosis and treatment of cancer."

Meanwhile, in Orange Coast Memorial's interventional radiology suite, thousands of minimally invasive procedures ranging from angioplasty to fibroid embolization are performed each year. Additionally, in the ultrasound suite, procedures ranging from fetal development monitoring to the diagnosis of heart problems are performed each day. Everything is high tech, including X-rays, which are now digital. Thanks to Orange Coast Memorial's picture-archiving communications system, all radiology tests can be stored digitally for online access anywhere, anytime.

And the future? Next summer, the radiology department will move into the 162,000-square-foot Orange Coast Patient Care Pavilion currently under construction on the hospital campus. New CT, PET/CT and MRI scanners will be installed, as well as a state-of-the-art gamma camera for nuclear medicine studies. For more information on radiology services at Orange Coast Memorial, call 1-800-MEMORIAL.