

May We Intervene?

BEHIND THE SCENES WITH INTERVENTIONAL RADIOLOGY

By Marian Wilson, R.N.

The face of a radiologist is rarely illuminated. Sitting in dim rooms, these physicians inspect images and compile reports. Their skill in interpreting X-ray films, CT scans and other diagnostic work directs patients' treatments, yet they receive little recognition. Their image is becoming more vivid as they take on lifesaving treatments that save patients recovery time and improve quality of life.

Diagnostic Detectives

While viewing test results, radiologists find problems that they can remedy. That's what Casey Fatz, M.D., of North Idaho Imaging Center found last summer as he inspected a scan showing a spleen that had been badly damaged. Dye was injected to

light up the patient's blood vessels and Fatz saw an artery that was actively bleeding. Abnormal shadows showed blood collecting around the patient's liver and spleen. Surgery to remove the spleen would be the likely outcome, but Fatz is a trained interventional radiologist. He completed a fellowship at M.D. Anderson Cancer Center in Houston last year to specialize in minimally invasive treatments that use imaging tools for guidance. Fatz took one look at the patient's bleeding spleen and thought, "I can embolize that."

By guiding a spaghetti-sized tube into blood vessel pathways, interventional radiologists can inject tiny

particles into blood vessels to stop blood flow. Embolization treatments work for many types of bleeding, including traumatic injuries to the spleen or pelvis, gastric bleeding, or severe nosebleeds.

Interventional radiologists at Kootenai Medical Center currently offer more than 30 different types of procedures and even more are expected in the future.

"It evolves all the time," Fatz says of his chosen field. "It's exciting to be on the forefront of technology."

Starving Tumors

Embolization may also be done to reduce blood flow to tumors. One procedure done by radiologists at KMC treats uterine fibroids. Up to 40 percent of all women over 35 are affected by these noncancerous growths that develop in the uterus wall. Fibroids are the most frequent cause of hysterectomies in premenopausal women. About 600,000 American women have hysterectomies annually and one-third of these are due to the pain and heavy bleeding caused by fibroids.

Radiologists can offer less time in recovery, minimal invasion to the body and quick healing time, says David Moody, M.D., an interventional

Interventional Radiology—A History

In 1964, an Oregon radiologist pioneered angioplasty, which involves guiding catheters through the blood pathway to open a clogged vessel. This technique was originally developed to treat peripheral vascular disease, which causes blockages in blood vessels of the arms, legs or feet.

Angioplasty was adopted by specialized cardiologists to prevent heart attacks, but radiologists perform similar procedures on other major arteries. Radiologists may place tiny cylinders called stents to keep narrowed vessels open. Restoring blood flow near the kidneys can reduce incidence of high blood pressure, stroke and kidney failure.



Did you know?

Here are some facts about interventional radiology you probably didn't know:

1. Spinal fractures resulting from osteoporosis can be treated by an interventional radiologist. In vertebroplasty, medical-grade cement is injected into the spine to stabilize vertebrae and alleviate pain.
2. Pain in the legs that occurs while walking and resolves at rest can be a symptom of peripheral vascular disease. Radiologists can reverse blood flow obstructions from this disease with angioplasty, the same procedure used to treat heart disease.
3. Infertility in men can be linked to varicoceles, which are abnormal veins in the genital organs. Surgery is performed on 70,000 American men with this condition annually, but radiologists can treat the problem less invasively with embolization to block blood flow.

Visit www.cdaradiology.com for more information on minimally invasive radiology techniques.

radiologist at North Idaho Imaging Center. He finds that women are generally happy with the outcome of uterine fibroid embolizations. The procedure cuts blood flow to the fibroid, saves the uterus and usually preserves the woman's ability to bear children.

"It's a good alternative to hysterectomy," Moody says.

He wants women to understand they have this option, which offers fewer risks than surgery and no scarring. A tiny puncture in the skin near the groin offers access to the blood vessel network. Women can be treated in an outpatient setting and are able to return to normal activities within a week.

Smaller Hospital, Big Technology

Moody trained at Loma Linda, a large university medical center in

California, but says he enjoys certain advantages a smaller hospital like KMC can provide.

"The profit margins allow us to invest in the latest technology," he says. "It's very important to us in radiology. It's probably one of the areas you notice differences the most, in advances in care and technology."

Vivid, three-dimensional images appear on the physicians' computers and help tremendously in surgical planning, Moody says. New procedural suites have large picture frames to give doctors a bigger view as they treat patients while watching X-rays in "live time."

Moody says he still spends the majority of his time in the dark reading films, but enjoys the opportunity to interact more with patients as an interventional radiologist.

"There's definitely more of a hands-on approach," he says.

North Idaho Imaging Center is a joint venture with Kootenai Medical Center and the physicians of Radiology Associates of North Idaho. ■



Above: David Moody, M.D., is one of the KMC radiologists who use interventional radiology to find and treat uterine fibroids, the most frequent cause of hysterectomies in pre-menopausal women.



Right: As a trained interventional radiologist, Casey Fatz, M.D., often finds himself in KMC's catheterization lab treating patients through minimally invasive techniques.

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