

# Multiparametric MRI in Action

*Gary Fisher, M.D., a cardiologist from Chevy Chase, Md., was 64 years old when, after his annual prostate-specific antigen (PSA) test, he noticed a worrying rise in PSA levels.*

Although he more commonly referred his own patients for follow-up, Dr. Fisher referred himself to one urologist who recommended a biopsy, and a second urologist who told him to wait and follow up with a new PSA test in four to six months. Dr. Fisher chose the latter option, and six months later, his PSA levels were higher still. Having heard about the new multiparametric magnetic

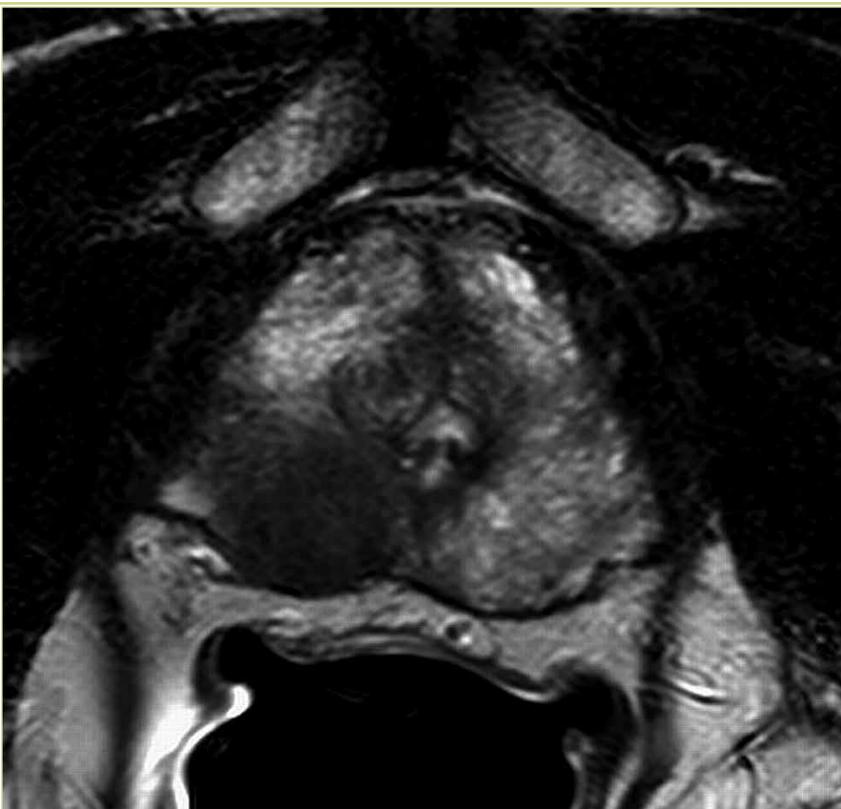
resonance imaging (MRI) being offered at NCI, Dr. Fisher opted to have his biopsy done using this new technique. Multiparametric MRI integrates traditional T2-weighted imaging with one or more functional techniques. “The procedure was very straightforward,” said Dr. Fisher, “and the MRI clearly showed an abnormality, which the biopsy confirmed as cancer.”

Dr. Fisher credits the MRI imaging technique pioneered by Peter Choyke, M.D., as contributing to his quick and accurate diagnosis. Of the 14 cores taken at biopsy, 12 random cores came back negative, and only the two cores guided by the multiparametric MRI came back positive. “Were it not for this informative MRI, I may well have left the clinical center with a negative biopsy and a continued recommendation of active surveillance,” said Dr. Fisher.

The imaging also helped the clinical team to visualize the unusual placement of the tumor, so that when Peter Pinto, M.D., performed Dr. Fisher’s surgery, a robotic radical prostatectomy, there were no surprises.

One year after surgery, Dr. Fisher remains very positive about his experience—he is thankful for the care and attention he received at the clinical center and extremely happy with the cancer-free outcome of the surgery—but it is his continued advocacy and many patient referrals over the last 12 months that are perhaps the most telling example of how he feels about the revolutionary prostate imaging and treatment options being pioneered at CCR.

(Photo: P. Choyke, CCR)



An example of a T2 weighted MRI of the prostate showing a prostate cancer on the left side of the image (patient's right). This image guided a targeted biopsy done at NCI.