MR imaging helps predict recurrence in prostate cancer patients

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MR images taken of prostate cancer patients prior to treatment that show that the cancer has spread outside the prostate gland capsule help predict whether the cancer will return, according to a recent study conducted by radiologists at the University of California-San Francisco.

The study consisted of 74 men with biopsy-proven prostate cancer who underwent endorectal MR imaging of the prostate, said Antonio Westphalen, MD, lead author of the study. Tumor size, stage and extracapsular extension (cancer spread outside the prostate gland capsule) were all recorded.

"The study focused on patients who were treated with radiation therapy, more specifically, external beam radiation therapy, which is the treatment of choice of about one-third of patients with newly diagnosed prostate cancer," said Dr. Westphalen.

After a follow-up of an average 42 months, four patients developed metastases – all four had extracapsular extension seen on MR imaging before treatment, Dr. Westphalen said. Three of them had more than 5mm of extracapsular extension at MR imaging, he said.

"The main goal of our study was to identify features on our imaging that would predict treatment failure, perhaps allowing for a more conscientious decision ahead of time. We found that a subset of patients who presented with imaging signs of extracapsular extension prior to radiation were more likely to develop metastases in the future," said Dr.

Westphalen.

The full results of the study will be presented on Tuesday, May 8, 2007 during the American Roentgen Ray Society Annual Meeting in Orlando, FL.

Source: American Roentgen Ray Society