RESEARCH NEWS

NEJM STUDY ON LONG-TERM SIDE EFFECT FUNCTIONAL OUTCOMES AFTER TREATMENT FOR LOCALIZED PROSTATE CANCER

January 31, 2013–A study published today in the New England Journal of Medicine that compared long-term urinary, bowel and sexual function after radical prostatectomy or external beam radiation in men treated with either of these two modalities for localized prostate cancer, found that men in both groups commonly experienced functional declines in all outcomes during the 15 years they were followed in the study. While there were divergences between the two groups in outcomes during the first five years after treatment, by year 15, the declines in functional outcomes were similar in both groups of men.

The study compared 1,655 men, ranging in age from 55 to 74 years of age, who were diagnosed with localized prostate cancer in 1994 or 1995 and who had subsequently either undergone surgery (radical prostatectomy) or radiotherapy (in the form of external beam radiotherapy). Their functional status was assessed at baseline and also at two, five, and 15 years after diagnosis.

At two years post diagnosis, men who had surgery were about six times more likely to have urinary incontinence compared to men who received radiotherapy. (At five years, surgery patients were about five times more likely to suffer incontinence.) However, by 15 years no significant differences remained between the two groups. The results followed that same pattern for erectile dysfunctions, with surgical patients reporting erectile dysfunction at almost 3.5 times the rate of radiotherapy patients at the 2-year mark, and twice the rate at the 5-year mark, no significant differences remained at 15 years out.

That pattern, however, reversed for reportage of bowel urgency at the two and 5-year mark. Surgical patients were 39 percent and 47 percent less likely to have this outcome at the two and 5-year mark respectively. But at the 15 year mark, again, no significant differences remained between the surgical and radiation cohorts.

The authors did find that overall, men treated with either surgery or radiation commonly reported functional declines in all three domains: sexual, urinary and bladder.

Dr. H. Ballentine Carter, MD, Director of Adult Urology at the Brady Urological Institute at Johns Hopkins University School of Medicine, who was not involved with the study, said one caveat to the study is that there is no data on whether or not the prostatectomies were performed at high-volume surgery centers, which can dramatically alter post-operative surgical functional outcomes. Overall, he thought the study was well done and the men were followed carefully.

Dr. Stuart Holden, director of the Louis Warschaw Prostate Cancer Center at Cedars-Sinai Medical Center and the medical director of the Prostate Cancer Foundation, who was not involved with the study, said while the study was well done, it lacked a control group of men to track the natural history of bowel, bladder and sexual dysfunctions. “This study tells us what was already fairly well known: the complications associated with surgery are more front-loaded, whereas those from radiotherapy are more back-loaded,” he said. And while it is good to know, he said, that at the 15 year mark men tend to end up in approximately the same functional states in terms of bowel, bladder and sexual function, it may be important to note that the men who most carefully report their symptoms are most likely men disgruntled by greater symptoms.

“We know the side effects of either of these forms of treatment are significant,” Holden said. “The critical question is not so much what treatment to choose, but should you be treated in the first place,” he added, referring to problem of overtreatment of prostate cancers—cancers that if left untreated would likely never shorten a man’s life span.

PCF-funded Janet L. Stanford is an author on the study.