Shorter course of prostate cancer radiotherapy could save NHS millions of pounds

Published on June 21, 2016 at 11:47 AM

New radiotherapy regime for prostate cancer could save NHS tens of millions per year

A shorter course of prostate cancer radiotherapy, involving fewer hospital visits and higher individual doses of radiotherapy, is as effective as the current standard treatment for both survival and quality of life, a major new study reports.

Researchers leading the 14-year trial - published in *The Lancet Oncology* today (Monday) - believe the new treatment schedule would be more convenient for patients and could save the NHS tens of millions of pounds per year.

The study, led by a team at The Institute of Cancer Research, London, and The Royal Marsden NHS Foundation Trust, found benefits for a 20-dose course of a modern type of radiotherapy over a 37-dose course, which is the current NHS standard.

The researchers said the findings of their study, which was funded by Cancer Research UK, supported a change in clinical practice for prostate cancer radiotherapy with the 20-dose schedule becoming the new standard.

Similar trials from the same research group - led by The Institute of Cancer Research (ICR) and The Royal Marsden, and including more than 70 UK centres - proved the benefits of fewer, higher doses of radiation in breast cancer, and helped set NICE guidance that has saved the NHS around £50 million a year since 2009.

The new regime for prostate cancer would save 17 hospital trips and complex radiotherapy treatments for each patient, leading to a reduction nationally of more than 150,000 visits per year.

The trial followed more than 3,200 men being treated for prostate cancer between 2002 and 2011 at more than 70 research centres across the UK.

It compared the standard radiotherapy schedule of 37 doses of 2 Grays per day with two other regimes - one delivering 19 doses of 3 Gray per day, and the other 20 doses of 3 Gray per day.

The results showed that after five years, the 20-dose schedule was not inferior to the 37-dose schedule for treatment effectiveness or quality of life.

The trial also showed that treatment with fewer, higher doses of intensity-modulated radiotherapy was associated with less than half the rate of side-effects of older conformal radiotherapy.

The trial has already introduced modern quality-assured 'intensity-modulated' radiotherapy for prostate cancer to dozens of research centres across the UK.

Lead investigator Professor David Dearnaley, Professor of Uro-Oncology at The Institute of Cancer Research, London, and Consultant Clinical Oncologist at The Royal Marsden, said:

"Our study shows that fewer, larger doses of intensity-modulated radiotherapy work just as well as more, smaller doses for men with prostate cancer, without reducing quality of life - and would save each man the inconvenience of 17 more hospital visits.

"If the new regime is incorporated into routine clinical practice, it will save the NHS tens of millions of pounds per year as well as freeing up space for other patients to have radiotherapy more quickly."

Study co-leader Dr Emma Hall, Deputy Director of the Cancer Research UK-funded Clinical Trials and Statistics Unit at The Institute of Cancer Research, London, which co-ordinated the study, said:

"Our trial showed this modern radiotherapy is as effective when used over 20 days as over 37 days, the present standard regime. Our results also show that using state-of-the art radiotherapy methods significantly reduces the treatment side effects that matter to patients.

"We already know many centres have already switched to the new regime, and we hope it will soon become the new standard of care for prostate cancer treatment on the NHS."

Professor Paul Workman, Chief Executive of The Institute of Cancer Research, London, said:

"This is an important study which opens the door to better, more convenient care for patients while saving the NHS valuable money that can be spent on other treatments. Our researchers have a strong track record not only of developing improved forms of radiotherapy but also in running major clinical trials like this that can deliver changes in routine clinical practice."

Source:
Institute of Cancer Research
