

Active monitoring, radical prostatectomy and radical radiotherapy in PSA-detected clinically localised prostate cancer: the ProtecT three-arm RCT

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Plain English summary

The ProtecT three-arm RCT

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Plain English summary

Prostate cancer is the most common cancer in men and is often found through a blood test called a prostate-specific antigen test and through biopsies of the prostate. Over the years, these tests led to the detection of many small cancers that do not cause harm. Some prostate cancers are harmful, but it is difficult to recognise them early. When cancer is still inside the prostate, the conventional treatments are surgery or radiotherapy, which carry side effects including leaking urine and difficulty getting an erection, so another option is repeat investigations at regular intervals (active monitoring), with treatments given if the cancer progresses. These options needed to be compared in a study called a 'randomised trial' in which men agree to be allocated to one of the three treatments.

In the Prostate testing for cancer and Treatment (ProtecT) study, 200,000 men aged 50–69 years were invited to have a prostate-specific antigen test. Of the 82,849 men who agreed to be tested, 1643 of whom had prostate cancer that was still contained in the prostate agreed to be allocated to one of the three treatments. After an average of 10 years of follow-up, 99% of men were alive in each of the treatment groups. However, when compared with active monitoring, surgery and radiotherapy reduced the risk of disease spreading outside the prostate by half. Patients reported that urinary leakage and sexual function were worst with surgery, and sexual and bowel functions were affected by radiotherapy. Men on active monitoring had a gradual decline in their urinary and sexual function, particularly as around half of them later had surgery or radiotherapy. Radiotherapy was the treatment that seemed to be the best value for money. The findings from the Prostate testing for cancer and Treatment (ProtecT) study can help men make decisions about being tested and which treatment to have if they are found to have cancer within the prostate. We now need to find out the longer-term effects of these treatments on how long men live and their quality of life.

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This report

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