

How Will Treating My Early-Stage Prostate Cancer **Affect My Quality of Life?**

Early-stage prostate cancer can be treated in different ways. The three main ways are active surveillance, surgery, and radiotherapy. Active surveillance means having your prostate checked every few months to make sure the cancer is not spreading. Surgery would take out the prostate, and radiotherapy uses high-energy rays to kill cancer cells in the prostate.

Two recent PCORI-funded studies compare the effects of these choices on the quality of life for men with early stage prostate cancer. These studies looked at three effects treatment might have on a man's quality of life. These are problems having sex, urinary problems, and bowel problems.



Prostate cancer grows very slowly, making the risk of dying from the cancer very low.

That gives you a chance to think about quality of life issues that matter most to you.

Here's what the new research says:

The different ways of treating early-stage prostate cancer (active surveillance, radiotherapy, or surgery) affect men differently. Men who have surgery or radiotherapy have more sexual, urinary, and bowel problems in the first year compared with men who were treated with active surveillance. After 2 to 3 years, most symptoms improve, but there may still be differences.



Surgery



Men who had surgery to remove the prostate (called a total prostatectomy) were:

- **more** likely to have problems with sex
 - **more** likely to leak urine
- than men who chose radiotherapy or active surveillance.

But men who had surgery had:

- **less** of a need to rush to the bathroom to pee
 - **less** of a feeling that their pee was unable to come out
- than men who chose radiotherapy or active surveillance.

What to expect after surgery:

- About four out of ten men who had surgery still had sexual problems 3 years after surgery.
- Problems leaking urine caused by surgery were more likely to improve than sexual problems. After one year, urinary leaking caused by surgery improved to what it had been before surgery.

Radiation



Men who had radiation to kill cancer cells in the prostate were:

- **more** likely to feel burning when peeing, more likely to feel that their pee won't come out, or a need to rush to the bathroom to pee
- **more** likely to feel the need to rush to the bathroom for a bowel movement. This was not as common as urinary problems or problems with sex.

What to expect after radiation:

- Urinary problems were more likely to get better by two years after treatment for men who had radiation from outside the body (external beam radiotherapy) than men who had radiation from pellets placed inside the body (brachytherapy).
- About 2 out of every 10 men who had radiation had sexual problems. These problems started a few months after men had radiation.



Important things to know when thinking about this evidence

- It is normal for most men to have sexual and urinary problems as they age.
- Men with early stage prostate cancer may have these symptoms because of the cancer or because of the treatment for cancer.
- If a man has problems with sex or urinary problems before treatment, the problems could be worse after treatment.
- Every man is different and may have to make decisions differently based on his age, race, family history, stage of cancer, and overall health.
- These studies only looked at the effects of treatment on quality of life.
- Ask your doctor about other sources of information to learn more about each treatment option.

Questions for Your Doctor

- 1 Given my diagnosis, when do I need to make this decision?
- 2 What other information should I read, and who can I talk to, to help me make this decision?
- 3 Are there ways that we can treat the side effects so that they don't affect my quality of life?
- 4 Are there any other side effects of surgery or radiation that I should be aware of?
- 5 Given my health and history, what are my chances that side effects will improve, like for some of these men?
- 6 What treatment would you recommend given what I've told you matters most to me?

Barocas DA, Alvarez J, Resnick MJ, *et al.* Association Between Radiation Therapy, Surgery, or Observation for Localized Prostate Cancer and Patient-Reported Outcomes After 3 Years. *JAMA*. 2017;317(11):1126–1140.

Chen RC, Basak R, Meyer A, *et al.* Association Between Choice of Radical Prostatectomy, External Beam Radiotherapy, Brachytherapy, or Active Surveillance and Patient-Reported Quality of Life Among Men With Localized Prostate Cancer. *JAMA*. 2017;317(11):1141–1150.

Where does the evidence come from?

Two PCORI-funded studies published in the March 21, 2017 issue of a major medical journal compared the effects of current treatment approaches. You can find the studies using the information to the left.

- These studies included about 3,600 men.
- Around one out of four men in these studies was a member of a racial or ethnic minority group.
- The treatments in these studies were up-to-date approaches to surgery and radiotherapy used today.

PCORI

1828 L STREET NW, SUITE 900
WASHINGTON, DC 20036
202.827.7700 • www.pcori.org

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