

Prostate Cancer: Hormone Therapy



Prostate cancer may be treated with hormone therapy. This is also called androgen deprivation therapy. Androgens are male hormones that are made mostly by the testicles.

Androgens boost the growth of prostate cancer cells. Hormone therapy lowers the amount of male hormones made by the body. Or it can stop the hormones from getting to the cancer cells. This treatment may be done with medicines. Or surgery may be done to remove the testicles (called an orchiectomy). Both lower the amount of male hormones in the body.

Is hormone therapy right for you?

Hormone therapy by itself doesn't cure prostate cancer, but it can shrink it and slow its growth. Here are the most common ways hormone therapy is used for prostate cancer:

- To shrink the tumor before radiation therapy
- As the main treatment if you can't have surgery or radiation therapy
- Along with, and maybe after, radiation if any or all of these are true:
 - The cancer is locally advanced (it has grown outside the prostate and into nearby areas).
 - You have a high PSA level.
 - The cancer cells look a lot different than healthy cells. This is called grade, and you may hear you have a high Gleason score.
- The cancer has spread to other parts of your body and can't be cured with surgery or radiation.
- Cancer is still there or has come back after surgery or radiation.

Hormone therapy with medicine

Hormone therapy can be done with different types of medicine. More than one type may be used for treatment. They include:

- LHRH (luteinizing hormone-releasing hormone) agonists. These lower the amount of male hormones made by the testicles. They are given by an injection. Or they may be small implants put under the skin.
- LHRH antagonists. These also lower the amount of male hormones made by the testicles. They do it more quickly than LHRH analogs. Some are given as an injection under the skin. Some are given as pills.
- CYP17 inhibitors. These decrease the amount of hormones made by prostate cancer cells themselves and other body cells. They don't lower the amount of androgens made by the testicles. So, they're used along with orchiectomy, LHRH analogs, or LHRH antagonists. They are given as pills.
- Anti-androgens. These stop male hormones from attaching to and working on prostate cancer cells. They're often used with orchiectomy, LHRH analogs, or LHRH antagonists. They are given as pills.

The length of time for hormone therapy varies. Sometimes it's started and stopped. This is called intermittent hormone therapy. Your healthcare provider will talk with you about the treatment schedule that's best for you.

Hormone therapy with surgery (orchiectomy)

An orchiectomy is surgery to remove the testicles. This takes away the source of most of the male hormones in the body. It can often slow or stop the growth of the prostate cancer. The surgery is done by a urologist. This is a healthcare provider who is a specialist in urinary and genital health.

The surgery is often done as an outpatient procedure. This means you go home the same day. During the surgery:

- The healthcare provider makes 1 or 2 small incisions (cuts) on each side of the scrotum. The testicles are removed. Prosthetic testicle implants can be put in if desired.
- The incisions are stitched, and the scrotum is left intact.

This surgery cannot be reversed, and it's not commonly done.

Side effects of hormone therapy

Overall, side effects are much the same for all types of hormone therapy. Most of them are caused by the decrease in male hormones. The side effects can include:

- Trouble getting or keeping an erection
- Less desire for sex
- Decrease in the size of the penis and testicles
- Enlarged and tender breasts
- Hot flashes
- Thinning of the bones (osteoporosis)
- Changes in facial hair
- Weight gain
- Muscle loss
- Anemia or low red blood cell count
- Feeling tired
- Depression
- Trouble with memory and concentration
- Diarrhea
- Nausea
- Increased cholesterol levels
- Increased risk of cardiovascular disease and diabetes

Other side effects might also be possible with certain medicines.

Coping with side effects

Talk with your healthcare provider about side effects linked with your treatment. Tell them right away about any changes you notice. There often are ways to manage side effects and keep them from getting worse. There may even be things you can do and medicines you can take to help prevent treatment side effects.

For instance:

- Weight-bearing exercise and medicine can help decrease bone loss.
- Regular exercise can help prevent weight gain and muscle loss. It can also help prevent depression and feeling tired.
- Medicine and therapy (counseling) can help treat depression.
- Certain medicines can help with hot flashes

Talk with your treatment team about what problems to watch for and when you need to call your healthcare provider. Also know what number to call after office hours and on weekends and holidays.

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