

## Introduction

Estrogen is a normal human hormone. Estrogen levels fall quickly after menopause. In younger women, they may fall earlier due to certain health conditions, medicines, or treatments. Low levels of estrogen can cause hot flashes or more serious problems, such as osteoporosis. When these problems arise, estrogen may be prescribed. Vaginal estrogen is much different than systemic estrogen taken by mouth or by patch. When placed in the vagina, estrogen is only absorbed a very small amount into the bloodstream, not enough to raise blood estrogen levels over normal post-menopausal estrogen levels. Side effects are low when used vaginally. However, if there is any history of breast/uterine cancer, heart attack, stroke, or blood clots, caution should always be considered.

## Why Use Estrogen Vaginal Cream as a Treatment?

Vaginal estrogen cream helps treat conditions that occur during or after menopause due to low estrogen levels. When estrogen levels decrease, the vagina and genital skin begins to thin and support muscles weaken. When these changes occur, it is often referred to as genitourinary syndrome of menopause. Women with genitourinary syndrome of menopause experience signs and symptoms associated with a decrease in estrogen and other sex steroids that involve changes to the bladder, urethra, vagina, introitus, clitoris, and labia majora/minora. Symptoms associated with this syndrome may result in vaginal dryness, vaginal burning and irritation, vaginal itching, dyspareunia, abnormal vaginal discharge, vaginal bleeding or spotting, vulvar pain, recurrent urinary tract infections, urinary urgency, urinary incontinence, and prolapse. Treatment options include both hormonal and non-hormonal interventions.

Creams do not cause higher than normal post-menopausal blood levels of estrogen. Sometimes, in the first 2 weeks of use, creams may have higher absorption because they are being used nightly on very thin skin/tissue. However, after 2 weeks of use, absorption should not be high and systemic estrogen levels should be consistent with normal post-menopausal levels.

## What Do Experts Say About the Safety of Vaginal Estrogen?

Recent reports of small increases in rates of breast cancer, heart attack, or stroke in women using estrogen as a pill taken by mouth have worried many women. It is important to know that estrogen used vaginally in small amounts is different. For many years, vaginal estrogen has been approved by the U.S. Food and Drug Administration to treat problems like discomfort with sex or urination, if they are caused by atrophy. According to a 2017 statement issued by the North American Menopause Society, hormone therapy remains the most effective treatment for genitourinary syndrome of menopause. Treatment should be individualized to maximize benefits of genitourinary syndrome of menopause therapy and minimize risks.

## What Are Other Choices if Vaginal Estrogen Is Not Used?

If a woman is unable or does not want to use vaginal estrogen, there are other choices to treat problems due to atrophy. Vaginal moisturizers can be used routinely or prior to sexual activity to help with vaginal dryness and dyspareunia. Water-based and oil-based lubricants can be used prior to intercourse to help with vaginal dryness and dyspareunia. Antibiotics and cranberry products may be used to help prevent urinary tract infections.

## Who Should Not Use Vaginal Estrogen?

It is best to talk to all of your health care providers prior to vaginal estrogen use. Women who are currently pregnant or have any of the following, are advised to be especially careful with estrogen use:

- Blood clots
- Stroke
- Heart disease
- Breast cancer
- Vaginal bleeding with unknown origin

## How Do You Use Vaginal Estrogen?

There are three choices when using vaginal estrogen. Two are placed in the vagina at bedtime, and one is used all the time:

- 1) **Cream:** With creams, you measure the dose into an applicator to insert in your vagina at bedtime. Your health care provider may also ask you to apply cream to the outside skin using your finger. Creams absorb easily, giving you the quickest comfort if you feel dry. However, creams are easier to over-use, and the easy absorption means higher blood levels compared to other choices. Creams are often used nightly to start and then used less often as atrophy lessens. They usually cost the least. Conjugated estrogens and estradiol are the most commonly used creams.
- 2) **Vaginal insert:** Estrogen or DHEA vaginal tablets or suppositories may be used. DHEA is not estrogen but it converts to both estrogen and testosterone and is used every night. Estrogen inserts can be used every night for 2 weeks and then twice a week for maintenance. Each insert may have its own plastic throw-away inserter. Inserts absorb more slowly, and very little medicine goes into the bloodstream. Some women say inserts are less messy, but others say the insert can fall out if it is not placed deep in the vagina or if the vagina bulges (prolapse).

- 3) **Ring:** Another choice is a ring that is placed in the vagina and slowly releases estrogen over 3 months. This provides a steady, very low level of estrogen. You can insert and remove the ring yourself, or your health care provider can do this for you at an office visit. If you have an untreated bulge or weak vaginal muscles, the ring may not stay in place.

## How Long Should Vaginal Estrogen Be Used?

Most vaginal estrogen studies to date have only followed women for 1 year. We only know they are low risk for that period of time; however, many post-menopausal women use these low-dose medications for many years. Other women choose to use them for a few months at a time or whenever they have symptoms.

## What Would Be a Good Choice for You?

*Please discuss any questions you have with your healthcare provider.*

Type: \_\_\_\_\_

How to use it: \_\_\_\_\_

How long to use it: \_\_\_\_\_

## Reference

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Reviewed and Edited by Audra Houser, CRNP, CUNP  
and Kelly Boyd, RN, MSN

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