



Danish Cancer Institute, Copenhagen, Denmark

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Vaginal oestrogen is a treatment on the rise, but is it safe?

With easier access to vaginal oestrogen therapy for genitourinary syndrome of menopause and as demand increases, further research on its safety is vital, says **Amani Meaidi**

Amani Meaidi *physician postdoctoral researcher, Cancer Surveillance and Pharmacoepidemiology*

Over 50% of women will develop genitourinary syndrome of menopause (GSM) when they transition from reproductive age to menopause.¹ GSM is constituted by symptoms such as pain during intercourse and postcoital bleeding, vaginal irritation and itching, and urinary tract infections and incontinence. GSM is caused by the urogenital atrophy that women develop because of the decline in oestrogen levels during menopause. This oestrogen deficiency persists after menopause, and often so does GSM, which has been shown to reduce the quality of life in postmenopausal women.²

Vaginal oestrogen therapy is the primary treatment for GSM. It's delivered locally as an oestrogen tablet, ring, or gel placed in the vagina, where it replaces the lacking oestrogen and promotes thickening and lubrication of the inner lining of the vagina and the bladder. Although the use of systemic oestrogen—taken orally in a much higher dose for menopausal hot flushes and night sweats—has declined substantially over the past two decades with the recognition of serious adverse effects,³ the use of vaginal oestrogen is rising.⁴ Its increasing use represents an overwhelming need in our ageing population, but it also suggests that people are comfortable with its use.

But is vaginal oestrogen safe? Systemic hormone therapy has been associated with an increased risk of breast cancer.⁵ When it comes to vaginal oestrogen therapy, only a small number of studies have investigated its effect on women's breast cancer risk. Those studies haven't been able to examine the influence of duration and dosage of vaginal oestrogen on the risk of developing breast cancer.⁵ This is a serious knowledge gap, since the risk profile of a drug often depends on both duration and dosage.

Studies so far

In our recent Danish nationwide study⁶ we attempted to fill this knowledge gap by studying the breast cancer safety of vaginal oestrogen tablets used in various lengths and dosages. We found no association between vaginal oestrogen use and breast cancer, even in postmenopausal women who had used the treatment for over nine years or in long term, high dose users.

The findings of our study add reassurance regarding the breast cancer safety of vaginal oestrogen therapy in postmenopausal women, but the complete risk profile of vaginal oestrogen is yet to be uncovered—for example, the risk to nearby organs remains uncertain. Studies have suggested an increased risk of uterine cancer with the use of

vaginal oestrogen, but the findings are yet to be established.⁷

In 2022, vaginal oestrogen tablets became available over the counter for the first time in the UK.⁸ The reclassification from prescription drug to over-the-counter medicine was intended to increase access to treatment that relieves menopausal symptoms. Considering the lack of awareness of GSM, as well as its underdiagnosis and undertreatment,¹² any initiatives that make it easier for women to receive treatment for their GSM are essential and justifiable. However, in the light of easier access to vaginal oestrogen therapy alongside increasing use and demand, it's important to press for further research on its safety.

Many women worldwide need relief from the symptoms of GSM. But they need to be sure that this is done in the safest manner.

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