

The efficacy and safety of estriol to treat vulvovaginal atrophy in postmenopausal women: a systematic literature review

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Context:

Vulvovaginal atrophy (VVA) is part of a collection of symptoms, including those of the urinary tract, now known as the genitourinary syndrome of menopause. With increased life expectancy, many women will spend more than one-third of their lives after their last menstrual period. Topical VVA treatments are divided into two types: nonhormonal lubricants and moisturizing creams. Because of possible systemic effects, several guidelines have recommended avoiding the use of topical vaginal estrogens in patients with a history of breast cancer.

Objectives:

To evaluate the efficacy and safety of estriol for the treatment of vulvovaginal atrophy in postmenopausal women.

Methods:

A systematic literature review was performed. We searched the following electronic databases: Medline, Cochrane, Embase, Lilacs, CINHALL and Google Scholar. The studies selected included controlled clinical trials and quasi-experimental studies. Selections were made in pairs and independently, first by title and abstract and then complete texts.

For the extraction of data and synthesis of evidence, we followed the methodology in the Cochrane Manual for Systematic Reviews of Interventions and we independently evaluated the risk of bias using the Cochrane risk of bias assessment tool.

Patients:

Postmenopausal women with vulvovaginal atrophy.

Intervention:

Studies selected included controlled clinical trials and quasi-experimental studies comparing vaginal estriol with placebo.

Main outcome:

Evaluate the efficacy and safety of estriol for the treatment of vulvovaginal atrophy.

Results:

We identified 188 studies, 22 of which met the inclusion criteria; 13 were controlled clinical trials and nine were quasi-experimental, and 1217 women were included. These studies confirmed the efficacy of local estrogens to treat symptoms of vulvovaginal atrophy with few adverse effects reported. Following treatment, serum estriol levels rose, peaking at 1 h. At the 6-month follow-up, there was no increase in serum estriol in treated women.

Conclusions:

The available evidence (of low and moderate quality) shows that, when administered vaginally, estriol preparations appear to be safe for women who have risk factors related to systemic estrogen therapy.

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