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Managing Urogenital Atrophy in Menopause

Introduction

Atrophic changes in the urogenital region is a frequent occurrence of postmenopausal women essentially due to estrogen deficiency. The vulva loses most of its collagen and adipose tissue thus becoming flat and thin. Lubrication through transudation from blood vessels and glandular secretions diminish. The vaginal surface becomes thinner, less elastic and more friable. These changes result in symptoms of vaginal dryness, itching, discomfort and painful intercourse.

Societal and cultural taboos besides the lack of awareness often inhibit women from discussing these problems with their practitioners. A private discussion in a professional atmosphere should help alleviate discomfort and enhance compliance with therapy. Health-care providers should routinely assess postmenopausal women for urogenital atrophy, which also exerts significant negative effects on the quality of life.

In Indian women urogenital symptoms have been shown to increase progressively in the peri-menopausal period reaching an incidence of more than 40% after menopause. A thorough history of symptom frequency and precipitating factors is important. Women experiencing frequent vaginal burning, irritation, and pruritus require a different approach from those who complain of intercourse-related dryness.

Treatment

Estrogen therapy (ET), if not contraindicated, is the treatment of choice for postmenopausal women with features of urogenital atrophy.

Local vaginal estrogen therapy is preferable, when systemic treatment is not needed for other reasons, because local therapy avoids most systemic adverse events and is probably also more efficacious for vaginal problems.

Topical Estrogens

Women experiencing vaginal atrophy can be offered any of the following effective vaginal estrogen replacement therapies: conjugated equine estrogen (CEE) cream, estriol or estradiol cream, a low-dose estradiol tablet or a sustained-release intra-vaginal estradiol ring.

A Cochrane review found that all methods of delivering oestrogen relieved the symptoms. Comparing the efficacy of different oestrogenic preparations in relieving the symptoms of vaginal atrophy, results favored the cream, ring, and tablets when compared to placebo and non-hormonal gel.

Vaginal estrogen creams are usually prescribed daily at bedtime for a week followed by twice weekly for a maximum of three months. The lowest dosage possible for the shortest length of time to control symptoms is advised.

The 25-µg 17 β-estradiol vaginal tablet has been approved by the FDA for atrophic vaginitis at a dosage of one tablet every day for 2 weeks. This is followed by one tablet twice every week.

The 17-β-estradiol tablets were equal in efficacy but preferred over creams by women in trials as they are less messy. However, the creams provide lubrication, which may provide additional benefit for women with dyspareunia.

Vaginal rings are a new FDA approved estrogen-delivery system, not available in India at present. These flexible 2-mg silicone rings deliver estradiol at a continuous rate of 6.5-15 µg/24 hours at a sustained rate for up to 12 weeks.

Although systemic absorption of estrogen can occur with local preparations, there is insufficient data to recommend annual endometrial surveillance or progesterone add-ons in asymptomatic women using local estrogens.

Vaginal atrophy may occur as a result of the treatment of many gynecological cancers. There is scant data regarding the use of vaginal estrogens in these women. The use of local estrogen may not be contraindicated. These women should receive appropriate counseling taking into account the severity of symptoms and their individual risk factors.
**Adverse Effects**: Overall, intra-vaginal products are tolerated well, with few reports of spotting or discharge, headache, and genital pruritus. If the discharge has a bad odor or is associated with vaginal itching or other signs of vaginal infection, further evaluation is warranted.

**Oral Estrogen**

Though oral estrogen has been shown to be effective to treat urogenital atrophy, the lowest dosage of oral medication and duration of treatment remains unclear. Up to 40% of women receiving systemic therapy do not get an adequate effect of estrogen on the vaginal mucosa.\(^5\)

All available low-dose local estrogen formulations are effective, but the optimal dose and preferred mode of estrogen administration to achieve symptom relief can vary from woman to woman. Individualization of therapy is the key to balancing the desired local effects of topical vaginal estrogens with potential systemic effects, which may or may not be desired.\(^6\)

**Alternate Treatment**

Tibolone 2.5 mg/day for 6 months in postmenopausal women with vaginal atrophy has significantly shown to improve vaginal dryness, dyspareunia, and signs of atrophic vaginitis without causing endometrial proliferation.\(^7\)

**Practical Application**

Vaginal estrogen creams are applied with a reusable plastic applicator with marked graduations for the product. To apply, the patient should lie down with knees drawn up, gently insert applicator deep into the vagina, and press plunger downward to its original position. The applicator should be washed with warm, soapy water after each use. Although these products usually are applied at bedtime, patients should be aware of possible leaking and undergarment staining. Estradiol vaginal tablets are inserted into the vagina with a single-use disposable applicator already containing the tablet. The tablet is inserted as far as possible without using force or causing discomfort. Estradiol vaginal rings should be pressed into an oval and then inserted into the upper third of the vaginal vault. The woman with clean, dry hands or health care provider with gloved hands can insert the ring with the woman standing with one leg up, squatting, or lying down in knees-up position. It is removed by hooking a finger into it and pulling it out. It is replaced every 3 months.

**Non-hormonal Products**

**Lubricants**

Regular sexual activity generally maintains vaginal health. Lubricants are generally considered a temporary measure to relieve vaginal dryness during intercourse. The formulations are a combination of protectants and thickening agents in a water-soluble base. Short durations of action limit their usefulness as a long-term solution. Lubricants must be applied frequently especially before sexual activity for continuous relief. Local lubricants can alleviate dryness and discomfort but do not reverse the histologic changes associated with urogenital aging.

**Moisturizers**

Vaginal moisturizers (containing polycarbophil gel) applied on a regular basis have an efficacy equivalent to local hormone replacement for the treatment of local urogenital symptoms such as vaginal itching, irritation, and dyspareunia, and should be offered to women wishing to avoid use of hormone therapy. The polymer attaches to mucin and epithelial cells on the vaginal wall through anionic binding. Polycarbophil carries up to 60 times its weight in water and holds water in place against the vaginal epithelial surface until it is sloughed off, typically after 24 hours or more. Due to this prolonged contact with the vaginal surface, moisturizers require only two to three applications a week and reaplication before sexual intercourse is not essential.

**Urinary Symptoms**

Women with urinary symptoms such as frequency, urgency and nocturia should be investigated by doing a Urine Culture and Blood sugar estimation, both Fasting and Post Prandial. If these investigations are normal or for menopausal women with recurrent urinary tract infections, who have no contraindication to local hormone replacement, vaginal estrogen therapy should be offered.

Lifestyle modification, bladder drill and anti-muscarinic therapy are recommended for the treatment of urge urinary incontinence. Systemic hormone replacement therapy, using conjugated equine oestrogen, may make incontinence worse.\(^8\) Estrogen therapy should not be recommended for the treatment of postmenopausal urge or stress urinary incontinence but may be recommended before corrective surgery. In the WHI trials, incontinence worsened in women taking CEE alone or with MPA compared with those taking a placebo. The authors concluded that the oral estrogen formulations used in the study increased the risk of urinary incontinence and therefore should not be used to treat it warranting further research.\(^9\)
Conclusion: Urogenital atrophy is a consequence of menopause. Women should be counseled that effective therapy is available. Estrogen deficiency is the primary cause of atrophic urogenital changes, and postmenopausal estrogen therapy, preferably vaginally is the first choice for treatment.

References


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