

What is vaginal atrophy?

Vaginal atrophy is a condition where there are changes in the “skin,” like the lining of the vagina, most commonly resulting from the loss of estrogen in peri-menopausal and postmenopausal women. Estrogen is responsible for maintaining the thickness, moisture and elasticity of the vagina, as well as maintaining optimal blood flow to the vagina and lower urinary system (bladder and bladder out-flow tube, or urethra). Estrogen is also responsible for creating and maintaining an acidic environment in the vagina with a pH ranging from 3.5 to 5.0. This acidic environment discourages the growth of potentially harmful bacteria and therefore protects against vaginal and urinary tract infections.

How does vaginal atrophy happen?

Menopause leads to a dramatic loss of estrogen. Medical evidence places this at an approximate 95 percent reduction. This significant drop in your body’s estrogen levels can result in a number of problems in your body. The vaginal tissue becomes thinner and dry resulting in burning, itching, vaginal discomfort and very often painful intercourse. The resulting inflammation also contributes to urinary symptoms such as frequency, urgency, painful urination, incontinence and recurrent urinary tract infections.

How does vaginal estrogen prevent frequent bladder infections?

Specifically in regard to urinary tract infections, without estrogen, the pH of the vagina increases to six or greater. Bacteria common to urinary tract infections flourish in an environment of increased pH which is much less acidic. Preventing vaginal atrophy in menopause can minimize discomfort and urinary tract infections. Studies have shown that the use of vaginal estrogen has been demonstrated to prevent urinary tract infections more than ten-fold in women with atrophy because it restores an acidic pH that prevents the growth of bacteria.

Locally applied estrogen has also been shown to be an excellent long-term treatment that improves the symptoms of vaginal dryness, painful intercourse, vaginal itching, urgency and frequency by restoring the health and integrity of the tissue.

How do I use vaginal estrogen?

Currently, there are three FDA approved formulations that provide estrogen locally to the vagina: vaginal creams, tablets and rings. The current recommended doses of vaginal estrogen include the vaginal cream 0.5 to 1.0 g twice weekly, the slow-release tablet inserted into the vagina two times per week, or the vaginal ring which releases a low-dose of estrogen continuously for three months. The risks and benefits of vaginal estrogen need to be considered, but vaginal estrogen probably does not pose the same risk as oral estrogen because of the minimal dose and local administration. Research shows that the blood level of estrogen rarely increases in patients on low-dose vaginal estrogen and thus the estrogen has the desired effect in the pelvis but is not associated with the effects of estrogen in other parts of the body that we see with oral estrogen. Of course vaginal lubricants and moisturizers are helpful in minimizing symptoms of vaginal atrophy, but they do not alleviate them, and they are totally ineffective for urinary symptoms.