

## Atrophic Vagina and Atrophic Vaginitis

Estrogen is a hormone that maintains the elastic, moist, and supple skin of the vulva and vagina. The ovaries produce estrogen before menopause, but when a woman goes through menopause or her ovaries are surgically removed, estrogen levels decline, and the internal vaginal skin often becomes thin, dry, and fragile. This is called vaginal atrophy (meaning thin). Some women remain comfortable although often need to use of a lubricant, but others experience dryness, irritation, rawness, painful sexual activity, and burning of the opening to the vagina. This is a common and normal – but uncomfortable – experience for women as they age. Overweight women and women who are frequently sexually active are often less troubled by thinning from low estrogen.

Fortunately, the treatment of an atrophic vagina and atrophic vaginitis is easy and extremely effective. Estrogen can be used in the vagina, with minimal effects to the body as a whole. Or, estrogen can be taken orally or by patch, if other symptoms of low estrogen are a problem, such as hot flashes, bone loss, or psychological symptoms. When estrogen is given by pill or patch, care must be taken to monitor for breast cancer, heart attack, and stroke. Although estrogen does not cause breast cancer, estrogen can allow it to grow faster. These risk partly depend upon the individual woman, smoking, and her family history for these problems. Estrogen inserted in the vagina is absorbed into the blood stream to a trivial degree when used as directed. Even most cancer doctors allow their breast cancer patients to use this.

Estrogen can be inserted in the vagina in several forms, with differing degrees of comfort, convenience, and cost. Estrogen cream is a treatment that has been used for many years. Either conjugated equine estrogen cream (Premarin<sup>R</sup>) or estradiol (Estrace<sup>R</sup>) cream can be inserted three

times a week with an applicator for several weeks, and then the frequency decreased to once or twice weekly. Some feel that estradiol may be less irritating. For minor symptoms, these creams can be applied inside the vagina with a finger, so that even less estrogen cream is used.

Alternatives include a small estradiol tablet (Vagifem<sup>R</sup>) inserted into the vagina about three nights a week. Finally, a flexible ring containing estradiol (ESTring<sup>R</sup>) can be inserted into the vagina, where the hormone is released gradually over three months, when it is replaced. The tablet and ring are less messy, but conjugated equine estrogen cream generally is the least expensive alternative. The amount of estrogen that is absorbed with any of these forms of local estrogen replacement is small.

After only a week or two of estrogen, most women notice a significant increase in vaginal moisture, which can be mistaken for a discharge from infection, rather than a return of normal vaginal secretions. The risk of a yeast infection is slightly higher the first month women use estrogen in the vagina, so some care providers suggest a fluconazole pill once a week initially to prevent this. The frequency of use of the local estrogen can be adjusted to that needed to remain comfortable. Sometimes, the estrogen can be stopped altogether when the patient is comfortable. Most of the time, however, without this added estrogen, the vaginal skin again thins, dries, and becomes uncomfortable.