

## PATIENT RESOURCES

### Vaginal Intraepithelial Neoplasia (VaIN)

#### What is vaginal intraepithelial neoplasia (VaIN)?

VaIN is changes in the skin cells lining the vagina. These changes are categorized as being mild or low grade (VaIN 1) or severe or high grade (VaIN 2/3). VaIN 2/3 is considered to be precancerous and may raise the risk of vaginal cancer.

#### What causes VaIN?

VaIN is commonly associated with human papillomavirus (HPV) infection. HPV infection is also the cause of most cervical dysplasia and cervical cancer. Women with VaIN often also have or have had in the past cervical intraepithelial neoplasia (CIN). Risk factors for vaginal cancer include age of first intercourse younger than 17, having five or more lifetime sexual partners, smoking, a weakened immune system, history of pelvic radiation therapy and exposure to diethylstilbestrol (DES) in utero. (DES) was a drug prescribed in the past to pregnant women to prevent miscarriage and premature birth. It was banned in the early 1970s due to its adverse effects on mothers and their children.

#### How is VaIN diagnosed?

If you have an abnormal Pap test result or your provider finds an abnormality of your vagina during routine pelvic exam, they may perform a closer microscopic examination of the vagina called a vaginoscopy. For some women, this procedure might occur at the same time as the colposcopy, which is a microscopic examination of the cervix. VaIN is diagnosed by taking a small tissue sample (biopsy) of abnormal appearing areas on the vagina at the time of the vaginoscopy. The biopsy samples are sent to a pathologist who determines if there is any evidence of VaIN.

#### What is the follow up for VaIN 1?

After a diagnosis of VaIN1, you will need to follow up regularly with your provider for repeat testing. If the results are abnormal, a repeat vaginoscopy is recommended. VaIN 1 is a minor abnormality that usually goes away over time without treatment. Waiting and repeating testing allows time for the abnormality to resolve and also enables the healthcare provider to find out if the abnormality has become more severe (this is uncommon).

#### What is the follow up for VaIN 2/3?

VaIN 2/3 is usually treated by removing or destroying the abnormal area (using a laser). In some cases, treatment with a medication (Fluorouracil, Efudex, Fluoroplex) in the vagina may be appropriate. Severe precancerous abnormalities (VaIN 3) are unlikely to go away without treatment and may someday progress to cancer if left untreated.