



Anal Intraepithelial Neoplasia

What is anal intraepithelial neoplasia?

Anal intraepithelial neoplasia (AIN) is a dysplastic (or abnormal skin change) condition of the squamous tissues of the anus. AIN is caused by the human papilloma virus (HPV). There are low-risk (HPV 6/11) and high-risk subtypes (HPV 16/18).

There are three types of AIN determined by biopsy: I, II, III. Type one is often referred to as low-grade squamous intraepithelial lesion (LSIL) on anal pap smear. Type II/III are often referred to as high-grade squamous intraepithelial lesions (HSIL) on anal pap smear.

How did I get AIN?

The HPV virus is transmitted via contact. The virus can reside unnoticed for months or years in the deep basal layer of the skin.

What are the risks of AIN?

It is not cancer but does have a risk of developing into anal cancer if untreated.

How is AIN diagnosed?

AIN can be diagnosed with screening using an anal pap smear, however this is not 100% accurate. Any abnormal pap smear should be confirmed with high resolution anoscopy (HRA) and biopsy. Any abnormal anal lesion should always be visualized and biopsied if suspicious.

What is HRA?

It involves the use of a magnifying scope and acetic acid and iodine staining to identify abnormal cells and tissue of the anus.

How is AIN treated?

Once AIN is identified with HRA, biopsy is initially performed. If the result is positive for AIN I, then only routine surveillance is needed. If AIN II/III is present, then the abnormally staining areas will require fulguration (burning) that can be performed in the office or operating room depending on severity. Routine surveillance is then needed with HRA; risk of recurrence is high with likely need for future treatment.

What is the recovery after treatment?

This depends on the individual. Most people are moderately uncomfortable for a few days after treatment, however there are no work/activity restrictions.