Basic anatomy of the anus
The anus has two types of cells on the inside of the anal canal: skin (squamo) cells and mucosal (columnar) cells. This is called the squamocolumnar junction. This is where most anal cancers will start to grow.

What is HPV?
HPV stands for human papillomavirus. It is the most common sexually transmitted disease and is passed through the genital tract, most commonly through vaginal and anal sex. It may also be passed during oral sex or genital-to-genital contact. HPV types 16 (most common) and 18 have been associated with anal cancer as well as other HPV-associated cancers.

Risk Factors
Risk factors for anal cancer are as follows:
- Age > 50 years
- Smoking
- Human Immunodeficiency Virus (HIV) creates an environment where it is easier to become infected with HPV.
- Having another HPV-related disease (vulvar, vaginal, cervical)
- Having other sexually transmitted infections (STI’s)
- Certain sexual practices: Men having Sex with Men (MSM), multiple sexual partners, anoreceptive sex.
- If you are on immunosuppression for an organ transplant, you are at increased risk for developing anal cancer.
- Chronic inflammation (IBD)

What are anal squamous intraepithelial lesions (LSIL/HSIL)?
Anal high-grade intraepithelial lesions (HSIL) are abnormal cells in the anal canal thought to be a pre-cancer before it turns into anal cancer. It is caused by human papillomavirus (HPV).

Other names for anal HSIL:
Anal dysplasia, anal intraepithelial neoplasia (AIN 2, 3), anal carcinoma in situ, Bowen’s Disease
Symptoms
Most people with anal dysplasia do not have symptoms. Thus, it is important to come for your regular colorectal surgery visits so that we may do routine screening with anal pap tests and HRA.

What is high-resolution anoscopy (HRA)?
High-resolution anoscopy or HRA is a screening tool used to detect anal precancerous lesions or cancer.

What to expect during your HRA
You will be placed on your side on the table. We will repeat an anal pap test in clinic. An anoscope (shaped like a plastic tube just larger than a finger) will be used to look into the anal canal, while two dyes are used to help find the abnormal cells. If there are any abnormal findings, a small piece of anal tissue (biopsy) will be obtained. This procedure will take 15-30 minutes.

Interpretation of results
If you have anal HSIL, there are several treatment options, including medication and ablation (in the office or operating room). Please call our office at (503)494-4373 to set-up an appointment or surgery.

Preparation for your visit
Do not take aspirin, ibuprofen, motrin, aleve, blood thinners (such as Coumadin, Xarelto, Eliquis, etc.), vitamin E, fish oil for 7 days prior to your clinic visit.

Prevention
The best way to prevent HPV infection is abstinence. If you are sexually active, using condoms may help in preventing infection with HPV during vaginal, oral, and anal sex, but it does not completely protect you from infection.

Our Research
OHSU is a premiere center for screening for anal cancer. We offer a weekly HRA Clinic. The providers involved with our HRA Clinic are also actively involved with HRA research. There are many unanswered questions in the field of anal cancer. No one knows how long it takes for anal dysplasia to progress to cancer. Through our research efforts, we hope to gain more knowledge about anal cancer. We are appreciative and grateful for your continued support in our research at OHSU.

If interested in learning about our research projects, please call Mr. Borzy at (503)494-4949.

For more information, please contact the Colon and Rectal Surgery Offices at OHSU.