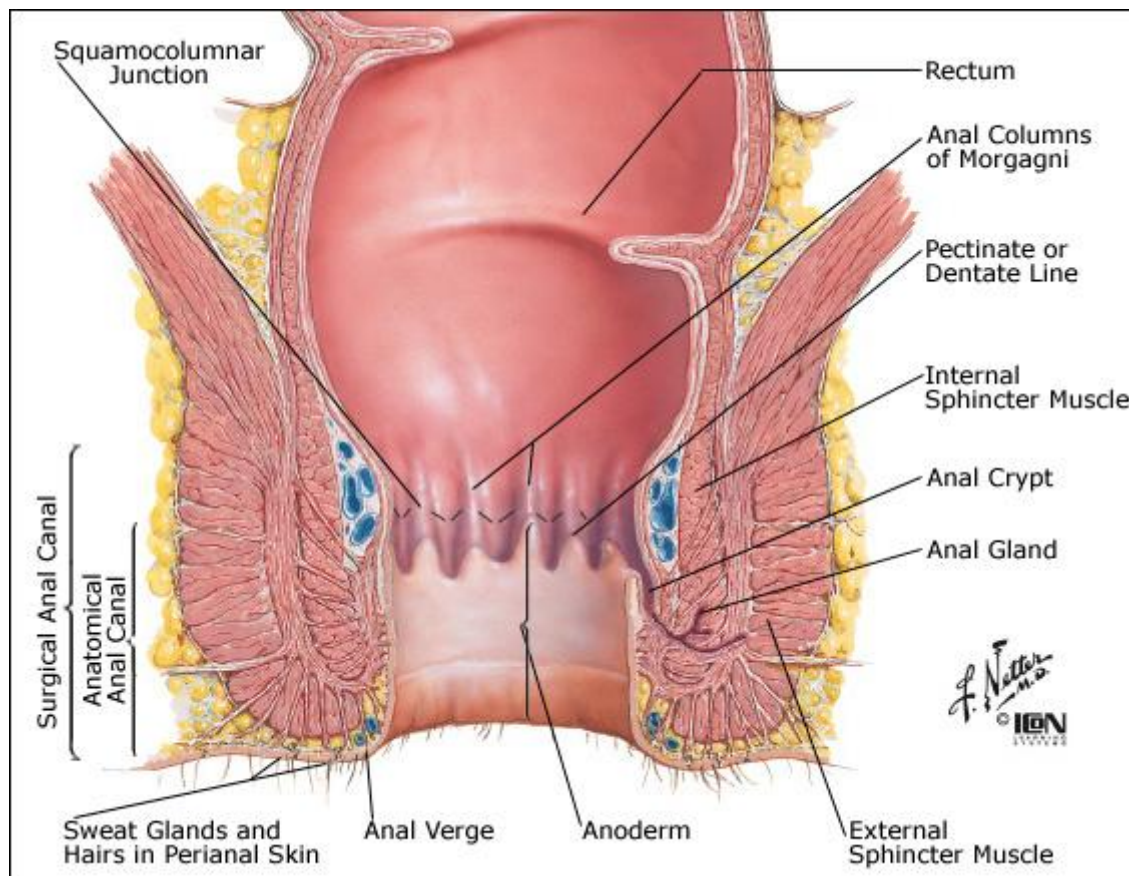


Anatomy of the anus



The anus is the opening to the lower gastrointestinal (GI) tract and connects to the rectum, which connects to the colon, which traveling backwards connects to the small intestine, then the stomach, then the esophagus and finally the mouth. The anus is approximately 2 to 3 inches long and composed of skin type cells also known as squamous cells. There are two sphincter muscles: an internal sphincter muscle, which can be felt as a muscular ring, beyond which is the rectum; and an external sphincter muscle. The upper portion of the anus, or that part that connects to the rectum, is known as the squamocolumnar junction. This is where the columnar or glandular epithelial cells of the rectum transition to the squamous cells of the anus. This border is somewhat irregular and dynamic meaning that it can be seen as a fluctuating undulating edge, when viewed during high-resolution anoscopy (HRA [1]) after application of 3% acetic acid (vinegar). There is a "toothed" or jagged line that corresponds to columns also known as the dentate line, which can be seen with the naked eye and is just below the squamocolumnar junction or towards the outside. This is followed by the anal canal, which leads to the anal verge, which is the junction on the outside of the anus of hair-bearing and non hair-bearing skin, similar to the junction of the lip of the mouth with the skin of the face. Beyond the verge traveling outwards for 2 inches is the perianal skin, which is also

referred to as the anal margin. The squamocolumnar junction is the area most commonly affected by HPV [2] and where many of the lesions are likely to arise. Historically a distinction has been made between anal canal or intra-anal cancers (cancers located within or inside of the anus) and anal margin or perianal area.

Again, the anus and rectum are different than the colon. Many people have a colonoscopy and assume this will also screen them for anal cancer. Colonoscopies bypass the anus entirely and look much further up in the intestinal tract. While some colorectal specialists look for and find anal lesions, they are often not specifically looking for them as they are looking mainly further up in the colon.

Contact Us
UCSF Main Site

© 2014 The Regents of the University of California

Source URL: <https://analcancerinfo.ucsf.edu/anatomy-anus>

Links

[1] <https://analcancerinfo.ucsf.edu/hra-0>

[2] <https://analcancerinfo.ucsf.edu/hpv>