



### **Infrequent Clinical Presentation of VPH| Anorectal Lesion**

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## **ABSTRACT**

*Intrahepatic neoplastic lesions are precursors of anorectal cancer, it is relatively rare and these are related to HPV and certain types of HPV such as HPV-16 and HPV-18 leading to precancerous lesions, therefore it is essential to perform typification. Early endoscopic diagnosis allows curative therapy, and proposes mucosal endoscopic resection. Endoscopic and histologic follow-up should be fundamental for the control and prevention of malignant lesions, hence the presentation of this clinical case.*

**Key words:** HPV, intraepideal neoplastic lesion, endoscopic resection.

## **Introduction**

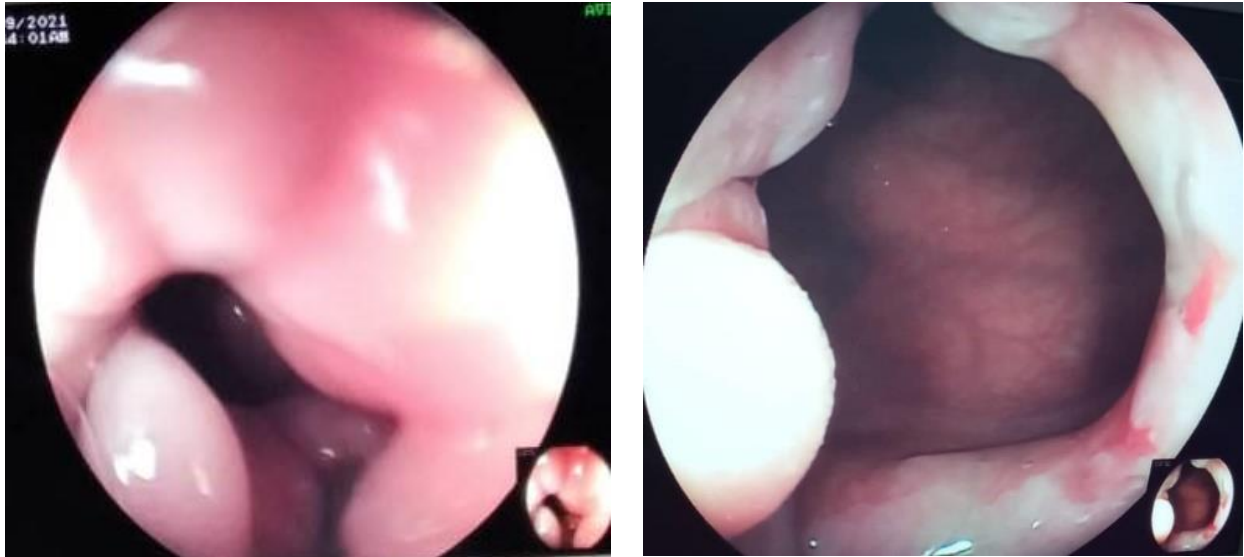
Colorectal cancer is the fourth most common cancer in the American region. Each year there are more than 240,000 new cases and approximately 112,000 deaths due to this disease in the region. Canada, Uruguay and Barbados have the highest incidence rates while Central American countries present the lowest. If no action is taken, the incidence of colorectal cancer is expected to increase by 60% by the year 2030 (1).

Regarding HPV, high incidences of neoplasias associated with the presence of the virus have been discovered, there are studies that suggest the possibility of infection of neoplastic tissues in colon and rectum by HPV, suggesting an association between its presence and the development of malignant lesions (2-3), which is why we bring this clinical case for the endoscopic and therapeutic management of these patients.

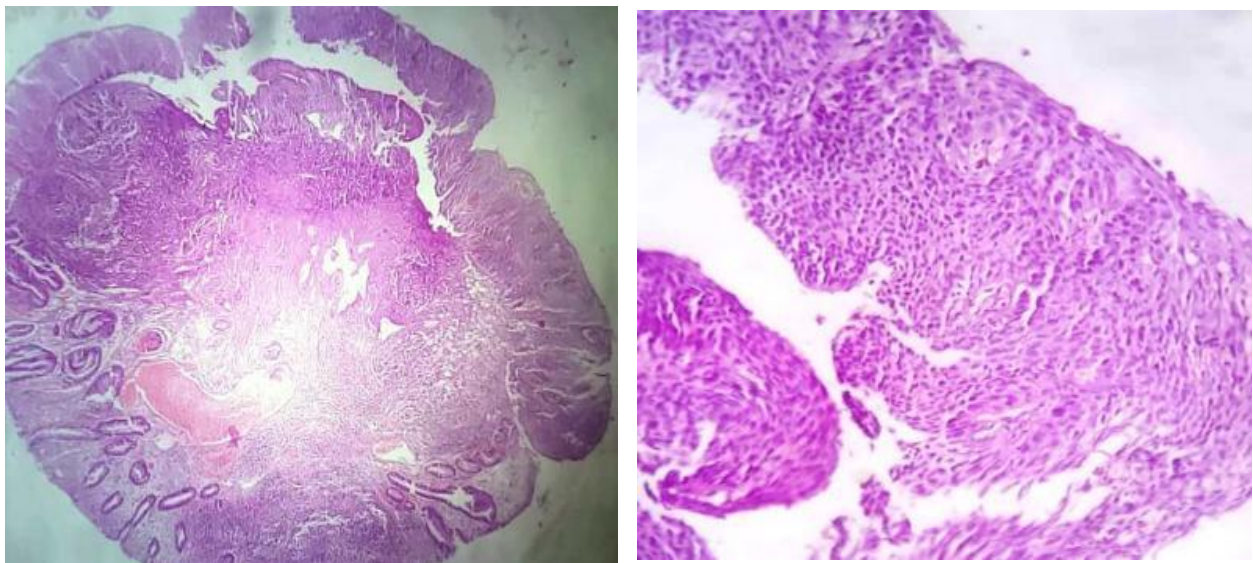
## **Clinical Case**

This is a 74-year-old female patient, with a medical history of hemorrhoidectomy and anal stenosis 20 years ago and no gynecological pathology; sexual history of two sexual partners, with negative HIV and VRDL results, who comes to the doctor for post voiding rectal pain and weight loss of 4 kg.

A video colonoscopy was performed finding rectal prolapse, hypertrophy of anal papillae and evidence of sessile polyp in the canal, performing endoscopic polypectomy with loop. Histology results were received reporting high grade anal intraepithelial neoplasia AIN II affecting the lower two thirds of the epithelium. Typification for HPV 16 is indicated.

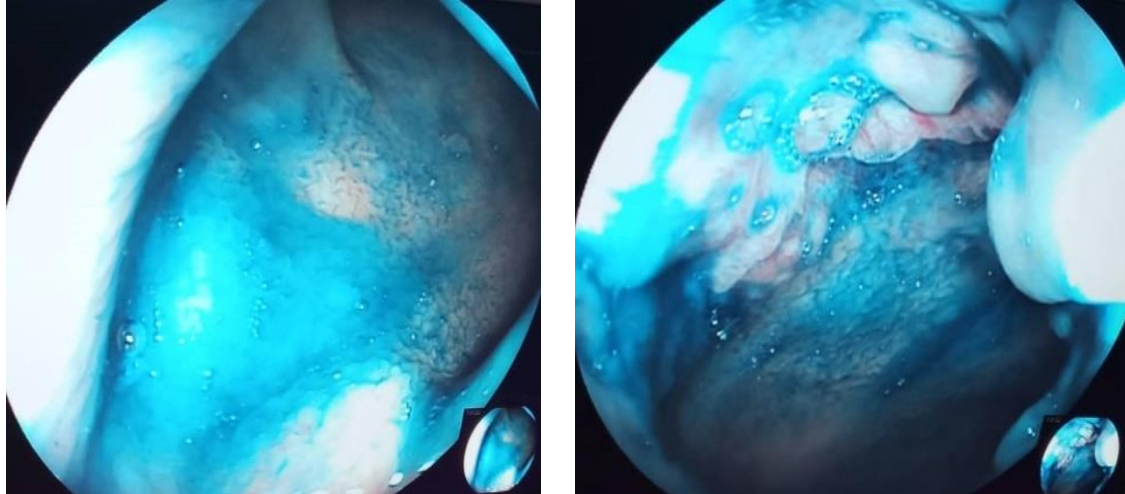


**Figure 1** Sessile lesion of 7mm, with a smooth and regular surface, which is performed endoscopically polypectomy.

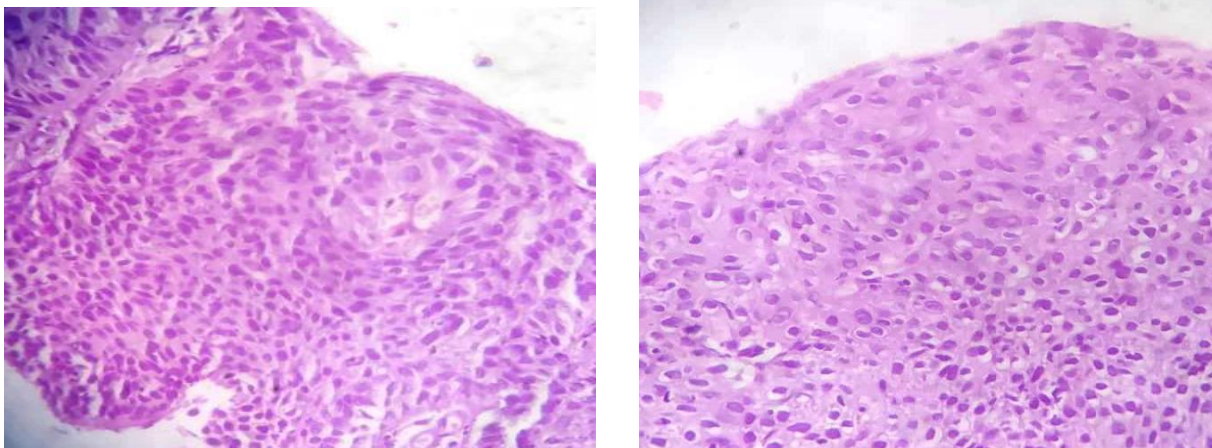


**Figure 2.** a. Transition from rectal mucosa to anal mucosa. Metaplasia zone; b. In greater detail the epithelium exhibits architectural distortion. Given by dysplasia in the lower two thirds of the epithelium.

Endoscopic control is performed in three months, observing in the lower rectum granular mucosa, erythematous, covering 30% of the organ, indigo carmin plus Sol 0.9% is applied, non-catching areas and areas irregula are observed; endoscopic mucosal resection is performed. Histology results were received reporting high grade rectum intraepithelial neoplasia AIN II affecting the lower two thirds of the epithelium.



**Figure 3.** Lower rectal mucosa with indigo carmine instillation



**Figure 4.** a. Dysplasia is due to stratification, hyperchromatic nuclei, increased nuclear-cytoplasmic ratio, and irregular nuclear membrane. Presence of mitosis at any level of the lower two-thirds of the epithelium; b. Viral changes associated with human papilloma virus infection, described as koilocytic changes. Epithelial cells with cytoplasmic clearance, cell membrane strengthening, nuclear irregularity, and pyknosis. Presence of binucleations.

Endoscopic control was performed after one year where no macroscopic alterations were evidenced in the mucosa and the histology study reports mucosa without malignancy.

## Discussion

Human papillomavirus (HPV) is a common, sexually transmitted virus. HPV is the most common viral infection of the reproductive tract and causes a variety of conditions in both men and women, including certain precancerous lesions that can progress to cancer and genital warts. In women, persistent infection with specific HPV types (most commonly HPV-16 and HPV-18) can lead to precancerous lesions that, if left untreated, can progress to cervical cancer. HPV infection is also associated with oropharyngeal and anogenital cancers, as well as other disorders in both men and women (4). However, statistics show an increase in HPV that involves not only the genital tract, but also the anorectal and esophagus.

The first reports on the study of the presence and spread of human papillomavirus in colorectal cancer, expressed at the end of the 1980s, a large number of studies have been conducted; however, the prevalence rates of HPV in CRC vary according to the available data, ranging from 0% to 85% (5).

An observational, descriptive, retrospective study was carried out in Mexico in which samples from 50 patients with a diagnosis of adenocarcinoma of the colon or rectum were used, supporting the theory of an association between colorectal adenocarcinoma and HPV (6).

In 2001 and 2002, Inoue H. and Kumagai Y. in Japan, invented an endoscopic diagnostic method, using the Endoscopic Magnification (EM) technique, achieving the detection and estimation in depth of squamous cell carcinoma of the esophagus, through the observation of alterations in the microvasculature or IPCL capillary loops "Intra Papillary Capillary Loops." (7-8)

In 2016 Aparcero and collaborators performed in 4 patients videocolonoscopy with the technique of virtual chromoendoscopy and endoscopic magnification, achieving the detection and characterization of intraepithelial neoplasia and early carcinoma of the anal canal. The endoscopic diagnosis is made by observing the alterations of the subepithelial microvascular architecture, based on the criteria, with high diagnostic certainty, of the IPCL (Intrapapillary Capillary Loops) classification used in the esophagus. The diagnosis of intraepithelial neoplasia and early squamous cell carcinoma of the anal canal allows for curative treatment at an early stage (9).

Regarding our patient with clinical symptoms of rectal pain, with the presence of a sessile lesion with anopectine line and histology that reports a neoplastic intraepithelial lesion of the anus and typing of

HPV 16. Therefore, in this case endoscopic control is performed with chromoendoscopy (indigo carmin) performing endoscopic mucosal resection (10).

## Conclusions

- The endoscopic study plus chromoendoscopy can determine the diagnosis and therapy in these cases.
- Endoscopic mucosal resection can be a curative for this type of lesions, however, the control over time will determine the process of these lesions.
- Histological study in conjunction with typing will dictate the prognosis of this type of lesions.
- More follow-up studies should be performed, from the response with the HPV vaccine and endoscopic controls to mark guidelines in this type of lesions.

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