

## Anal intraepithelial neoplasia screening during colonoscopy: a technical proposal

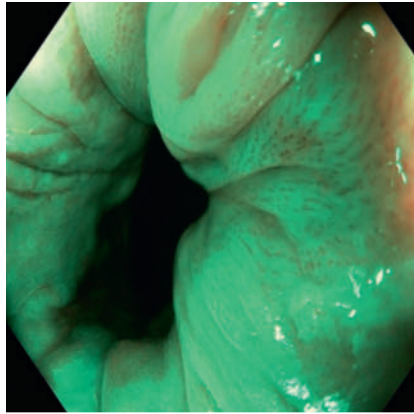


Current recommendations for anal cancer screening are limited to high risk populations, utilizing anal cytology, high risk human papillomavirus (HPV) testing, and high-risk HPV-cytology co-testing. Depending on the results, patients are then referred for further evaluation with high-resolution anoscopy (HRA), a resource that is scarce in most locations [1]. This procedure can identify anal intraepithelial neoplasias (AINs), precursor lesions of anal squamous cell carcinoma, allowing for early treatment [2].

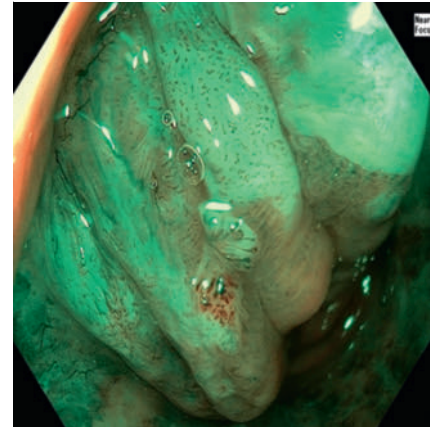
Magnifying or image-enhanced endoscopies provide superior magnification compared to HRA [2], and a classification system for AIN has even been proposed [3]. However, blind anorectal intubation remains a common practice during colonoscopy [4], missing the opportunity to diagnose AIN.

In this video, we demonstrate the inspection of the anal canal using narrow-band imaging (NBI) and near focus with an Evis EXERA III CV-190 processor, Evis EXERA III CLV-190 light source, and CF-HQ-190 colonoscope (Olympus Medical Systems, Tokyo, Japan). The goal is to detect AIN, with a special focus on identifying abnormal intrapapillary capillary loops (► **Fig. 1**, ► **Fig. 2**). Given the short length of the anal canal, its inspection can be quickly performed before the colonoscopy (► **Video 1**). The proximity of the canal walls makes the use of near focus or magnification highly advantageous, allowing for the detection of lesions that are often underdiagnosed.

Although there are limitations in the evaluation of the anal canal, the squamocolumnar junction can still be reasonably observed through insufflation or retroflexion [2]. After identifying the suspicious lesion, we chose to comple-



► **Fig. 1** Low grade dysplastic lesion of the anal canal detected via colonoscopy with narrow-band imaging (NBI) and near focus.



► **Fig. 2** High grade dysplastic lesion of the anal canal with dilated, tortuous, and meandering intrapapillary capillary loops assessed using a disposable anoscope and NBI and near focus.

ment the examination with a disposable anoscope to achieve better visualization and stabilization for performing biopsies.

In this way, we consider that anal canal evaluation should be performed during all colonoscopies using NBI and near focus/magnification, aiming to identify AIN.

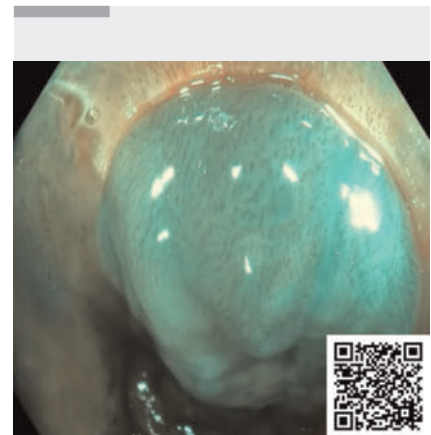
Endoscopy\_UCTN\_Code\_TTT\_1AQ\_2AI

### Acknowledgement

We would like to thank Dr. Andreia Albuquerque from Fernando Pessoa Teaching Hospital, Portugal, for her assistance in improving our management of anal intraepithelial neoplasia cases.

### Conflict of Interest

The authors declare that they have no conflict of interest.



► **Video 1** Anal evaluation during colonoscopy with the aim of identifying anal intraepithelial neoplasia.

## The authors

**Willian Ferreira Igi<sup>1</sup>**, **Daiane Marrai Costa Nascimento<sup>1</sup>**, **Magda Priscila Cardoso Afonso<sup>2</sup>**, **Fernando Lander Mota<sup>3</sup>**, **Lucas Santana Nova da Costa<sup>4</sup>**, **Eloisa Barbosa Brum<sup>5</sup>**, **Fernanda Freitas Franca Rocha<sup>6</sup>**

- 1 Departamento de Gastroenterologia, CAEDRO – Centro Avançado de Endoscopia Digestiva de Rondônia, Porto Velho, Brazil
- 2 Endoscopy Department, Hospital de Amor, Barretos, Brazil
- 3 Endoscopy Unit, Hospital Sírio-Libanês, São Paulo, Brazil
- 4 Endoscopy Unit, Hospital Sírio-Libanês, Brasília, Brazil
- 5 Serviço de Coloproctologia, Hospital Barão de Lucena, Recife, Brazil
- 6 Gastroenterology Department, 6. Hospital das Clínicas da Faculdade de Medicina de Ribeirão Preto, Ribeirão Preto, Brazil

## Corresponding author

**Willian Ferreira Igi, MD**

CAEDRO – Centro Avançado de Endoscopia Digestiva de Rondônia, Rua Julio de Castilho, 149, sala 03, Centro, Porto Velho/RO, 76801-078, Brazil  
willianigi@hotmail.com

## References

- [1] Stier EA, Clarke MA, Deshmukh AA et al. International Anal Neoplasia Society's consensus guidelines for anal cancer screening. *Int J Cancer* 2024; 154: 1694–1702. doi:10.1002/ijc.34850
- [2] Sakamoto T, Akiyama S, Narasaka T et al. Anal intraepithelial neoplasia: Precursor of anal squamous cell carcinoma. *J Anus Rectum Colon* 2022; 6: 92–99. doi:10.23922/jarc.2021-077
- [3] Pecere S, Hassan C, La Milia D et al. Accuracy of narrow-band imaging in predicting the histology of anal intraepithelial lesions. *Eur J Gastroenterol Hepatol* 2023; 35: 31–35. doi:10.1097/MEG.0000000000002457
- [4] Martínez-Alcalá A, Manovski K, Mönkemüller K. Direct anorectal intubation during colonoscopy: a logical new paradigm. *Endoscopy* 2023; 55: E488–E489. doi:10.1055/a-2025-0284

## Bibliography

*Endoscopy* 2024; 56: E762–E763

DOI 10.1055/a-2387-4051

ISSN 0013-726X

© 2024. The Author(s).

This is an open access article published by Thieme under the terms of the Creative Commons Attribution License, permitting unrestricted use, distribution, and reproduction so long as the original work is properly cited.

(<https://creativecommons.org/licenses/by/4.0/>)

Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany



## ENDOSCOPY E-VIDEOS

<https://eref.thieme.de/e-videos>



*E-Videos* is an open access online section of the journal *Endoscopy*, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high-quality video and are published with a Creative Commons CC-BY license. *Endoscopy E-Videos* qualify for HINARI discounts and waivers and eligibility is automatically checked during the submission process. We grant 100% waivers to articles whose corresponding authors are based in Group A countries and 50% waivers to those who are based in Group B countries as classified by Research4Life (see: <https://www.research4life.org/access/eligibility/>).

This section has its own submission website at

<https://mc.manuscriptcentral.com/e-videos>