

# Low-grade dysplasia on Barrett's esophagus: visible or not ?



## Authors

Maximilien Barret<sup>1</sup>

## Institutions

1 PARIS, Hopital Cochin, Paris, France

## Key words

Barrett's and adenocarcinoma, Endoscopy Upper GI Tract, Diagnosis and imaging (inc chromoendoscopy, NBI, iSCAN, FICE, CLE), RFA and ablative methods

received 3.7.2023

accepted after revision 17.7.2023

## Bibliography

Endosc Int Open 2023; 11: E816–E817

DOI 10.1055/a-2145-5564

ISSN 2364-3722

© 2023. The Author(s).

This is an open access article published by Thieme under the terms of the Creative Commons Attribution-NonDerivative-NonCommercial License, permitting copying and reproduction so long as the original work is given appropriate credit. Contents may not be used for commercial purposes, or adapted, remixed, transformed or built upon. (<https://creativecommons.org/licenses/by-nc-nd/4.0/>)

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

## Corresponding author

Dr. Maximilien Barret, Hopital Cochin, PARIS, rue du faubourg  
st jacques 27, 75014 Paris, France  
[maximilien.barret@aphp.fr](mailto:maximilien.barret@aphp.fr)

Current management of Barrett's esophagus (BE) relies on endoscopic follow-up of non-dysplastic BE, endoscopic resection of visible lesions, and ablation of flat dysplastic or residual BE. Indeed, so-called "visible lesions" arising in BE, mainly consisting of Paris 0-IIa and 0-IIb lesions, harbor early adenocarcinoma in 57% to 63% of cases, justifying endoscopic resection for adequate tumor staging [1, 2]. While high-grade dysplasia (HGD) without any visible lesion is exceedingly rare, low-grade dysplasia (LGD) has long been considered endoscopically indistinguishable from non-dysplastic BE. Actually, LGD is observed in 7% to 8% of endoscopic resection specimens [1, 2], suggesting that a certain proportion of BE with low-grade dysplasia is actually visible.

In this issue of Endoscopy International Open, Tony He et al. investigated the frequency of visible LGD among patients with dysplastic BE referred to an expert center in Melbourne, and sought to describe the endoscopic features of BE with LGD [3]. In their retrospective analysis of 135 patients with confirmed LGD, they observed a visible lesion in 50% of the patients (68/135). Among these, 18% (24/135) had Paris 0-IIa lesions, and 33% (44/135) had Paris 0-IIb lesions, with only pit pattern and vascular pattern abnormalities. Interestingly, 87% of the patients (58/67) without visible lesions only had a single, small focus of LGD on the Seattle biopsy protocol, suggesting that

visible LGD could be at higher risk of neoplastic progression because of more numerous, larger, and deeper foci of dysplasia.

The 50% rate of visible LGD reported by He et al. is much higher than the 6% to 19% reported in other Barrett's expert centers. It can be explained by the systematic use of a cap to analyze the Barrett's segment, the specific expertise of the group in analyzing the Barrett's mucosa, demonstrated by the description in 2019 of the diffuse endoscopically visible LGD in BE or DEVLB [4], and the performances in diagnostic endoscopy of the community centers involved. However, the fact that LGD is endoscopically invisible in half of the cases, even to experts specifically seeking it, reminds us that random biopsies following the Seattle protocol are still needed in 2023.

Conflicting data have been reported on the benefit of treating BE with LGD using radiofrequency ablation [5, 6]. If, like He et al., we manage to identify the 50% of patients with visible LGD on BE, possibly picking up the half of patients with the highest risk of neoplastic progression, and treat them with endoscopic resection and ablation of the residual BE, we might safely offer annual endoscopic follow-up to the other half of patients with BE and LGD.

## Conflict of Interest

---

Olympus, Fujifilm, Pentax, Medtronic, Sanofi, Dr Falk Pharma, Nor-gine.

## References

---

- [1] Alvarez Herrero L, Pouw RE, van Vilsteren FGI et al. Safety and efficacy of multiband mucosectomy in 1060 resections in Barrett's esophagus. *Endoscopy* 2011; 43: 177–183
- [2] Pouw RE, Beyna T, Belghazi K et al. A prospective multicenter study using a new multiband mucosectomy device for endoscopic resection of early neoplasia in Barrett's esophagus. *Gastrointest Endosc* 2018; 88: 647–654 doi:10.1016/j.gie.2018.06.030
- [3] He T, Iyer K, Lai M et al. Endoscopic features of low-grade dysplastic Barrett's. *Endosc Int Open* 2023; 11: E736–E742
- [4] Tsoi EH, Fehily S, Williams R et al. Diffuse endoscopically visible, predominantly low grade dysplasia in Barrett's esophagus (with video). *Endosc Int Open* 2019; 7: E1742–E1747
- [5] Phoa KN, van Vilsteren FGI, Weusten BLAM et al. Radiofrequency ablation vs endoscopic surveillance for patients with Barrett esophagus and low-grade dysplasia: a randomized clinical trial. *JAMA* 2014; 311: 1209–1217
- [6] Barret M, Pioche M, Terris B et al. Endoscopic radiofrequency ablation or surveillance in patients with Barrett's oesophagus with confirmed low-grade dysplasia: a multicentre randomised trial. *Gut* 2021; 70: 1014–1022 doi:10.1136/gutjnl-2020-322082