Endoscopic dilatation for esophageal stenosis is an invasive and repetitive procedure. Different modalities exist (balloon dilatation, bougie dilatation) with similar efficacy [1], but their different ecological impact should be considered during endoscopic procedures [2, 3]. We report the technique of dilatation using the bougie cap (Ovesco, Tuebingen) that could have an impact on reducing waste during this kind of procedure. A 20-year-old woman with a caustic esophageal stenosis was referred to our center for a first dilatation. The stenosis was located in the middle esophagus, measured 2 cm, and was not passable by the endoscope. From the available methods, we chose to use the bougie cap given its lowest weight of waste (3 grams in total with package) compared with the balloon dilatation strategy using a balloon and manometer (483 grams, ▶ Fig. 1). After inserting the cap on the extremity of the endoscope, the latter was pushed through the stenosis provoking mucosal linear damage and a widening of the lumen (▶ Video 1). No immediate complication was noticed. From an ecological perspective, the use of this technique could significantly reduce our plastic waste (99% less). Bougie dilatation is an alternative because it is reusable, however disinfection can be suboptimal raising hygiene issues [4]. Studies are urgently needed to confirm the medico-economical and environmental advantages while preserving the efficacy and safety profile of dilatation strategies.

Competing interests
Clara Yzet received consultant and lecture fees from Abbvie, Takeda, Galapagos, Janssen and Ferring.

The authors
Clara Yzet¹, Mariana Figueiredo¹, Claire Michoud¹, Pierre Lafeuille¹, Jérôme Rivory¹, Mathieu Pioche¹,²
¹ Gastroenterology and Endoscopy Unit, Pavillon L, Edouard Herriot Hospital, Lyon, France
² Inserm U1032, Labtau, Lyon, France

▶ Fig. 1 Strategies of dilatation with the available devices and weight of waste. a Bougie cap device. b Weight of the bougie cap with its package. c Balloon dilation kit with balloon and manometer and its weight. d Conventional bougies.
Corresponding author

Clara Yzet, MD
Service hépato-gastroentérologie, Hopital Edouard Herriot, 5 place d’Arsonval, 69003 Lyon, France
yzet.clara@chu-amiens.fr

References


Video 1 Ecological impact of endoscopic dilatation using the bougie cap device: a low-tech innovation to reduce waste by 99%.

Bibliography

Endoscopy
DOI 10.1055/a-1838-3860
ISSN 0013-726X
published online 2022
© 2022. 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

ENDOSCOPY E-VIDEOS
https://eref.thieme.de/e-videos

Endoscopy E-Videos is an open access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online. Processing charges apply (currently EUR 375), discounts and waivers acc. to HINARI are available.
This section has its own submission website at https://mc.manuscriptcentral.com/e-videos