A 53-year-old man with no relevant past medical history was referred to our department for resection of a laterally spreading tumor (LST) on the descending colon, which had been tattooed previously.

The procedure was performed with a transparent cap attached to the tip of the colonoscope (Q185; Olympus Medical Systems, Tokyo, Japan), with the patient under deep propofol sedation. A 40-mm nongranular, homogeneous LST was identified, overlying a previously placed carbon tattoo (▶Fig. 1), with resulting severe fibrosis that precluded elevation for conventional endoscopic mucosal resection (EMR). Therefore, underwater piecemeal EMR was performed, after marking the lesion limits with snare tip coagulation (▶Video1). Complete resection was achieved without complications. The procedure exposed involvement of almost all of the submucosa by the ink (▶Fig. 2). The patient was discharged on the same day.

Histopathological analysis revealed a tubular adenoma with low grade dysplasia, and with carbon pigment in the margins of most fragments. On surveillance colonoscopy 3 months later, the scar had no endoscopic or histological recurrence (▶Fig. 3).

Endoscopic tattooing is a widely used technique to facilitate the identification of colorectal lesions for subsequent endoscopic or surgical treatments [1, 2]. However, tattooing has been associated with clinically significant complications, including peritonitis [1, 2]. Additionally, tattooing under a lesion can result in technical difficulties because of associated submucosal fibrosis, which makes endoscopic resection procedures hazardous and has contributed to perforation [1–3]. In fact, carbon particles can spread across a significant distance within the submucosal plane; it is therefore recommended that tattoos are placed 2–3 cm anatomically distal to the lesion [1, 2]. Underwater EMR has been shown to be a useful technique for lesions that are difficult to resect, including those associated with fibrosis [4, 5]. In the present report, we present the first case of a successful underwater EMR of a lesion associated with fibrosis secondary to tattoo.

Endoscopy_UCTN_Code_CPL_1AJ_2AD
Video 1 Underwater piecemeal endoscopic mucosal resection of a laterally spreading tumor overlying a previous endoscopic carbon tattoo with associated severe fibrosis.

Competing interests
None

The authors
Jaime P. Rodrigues, Rolando Pinho, Mafalda Sousa, João Carlos Silva, Catarina Gomes, João Carvalho
Gastroenterology Department, Centro Hospitalar Vila Nova de Gaia/Espinho, Vila Nova de Gaia, Portugal

Corresponding author
Jaime Pereira Rodrigues, MD
Gastroenterology Department, Centro Hospitalar Vila Nova de Gaia/Espinho, Rua Conceição Fernandes, 4434-502, Vila Nova de Gaia, Portugal
Fax: +351-227-865100
jaimepereirarodrigues@gmail.com

References


Bibliography
DOI https://doi.org/10.1055/a-0624-1362
Published online: 19.6.2018
Endoscopy 2018; 50: E231–E232
© Georg Thieme Verlag KG
Stuttgart - New York
ISSN 0013-726X

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

Endoscopy E-Videos is a free 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.

This section has its own submission website at https://mc.manuscriptcentral.com/e-videos