Colonic Abrikossoff tumor: fortuitous discovery at colonoscopy for serrated adenomas polyposis, and resection by endoscopic submucosal dissection

Granular cell tumors (GCTs) are a type of submucosal tumor, with an overall soft tissue tumor incidence of 0.03% [1]. They are benign neural tumors presenting typically in the dermis or subcutis, in adults, and more frequently in women. Amongst all GCTs, 5% – 11% occur in the gastrointestinal (GI) tract. The second most commonly affected GI organ is the colon (20%) and GCTs may be located anywhere in it [2].

Colonic GCTs typically appear as yellowish firm lesions with intact mucosa but they can also be sessile or pedunculated polyps. Patients may have additional findings on colonoscopy, including adenomas and hyperplastic polyps, which are likely unrelated to the presence of GCTs [3]. We report here the case of a 59-year-old woman who underwent a first colonoscopy for rectal bleeding, which led to a finding of serrated adenomas polyposis. A further colonoscopy was performed that revealed in the right colon, a small, white and yellowish submucosal lesion 5 mm in size (Fig. 1). A diagnosis of small neuroendocrine tumor (NET) was initially proposed, and we used a strategy of endoscopic submucosal dissection (ESD) with traction using two clips and a rubber band [4]. Traction allowed the correct exposure of the submucosal lesion (Video 1, Fig. 2), and then the resection was en bloc and endoscopically complete.

Pathological examination (Fig. 3) revealed a well-circumscribed nodular tumor in the colonic submucosa composed of nests of tumor cells divided by slender fibrous septa. Cells were polygonal or spindle with a small nucleus and large eosinophilic cytoplasm with a distinctly granular appearance. These granules correspond to phagolysosomes. Immunohistochemical study showed diffuse S100 protein expression by tumor cells. Resection was complete with free margins (R0).
Granular cell tumors are rare in the GI tract, occurring with differing endoscopic features and difficult to distinguish from NETs. Endoscopic submucosal dissection may allow a complete resection of the lesion to facilitate the pathology analysis.

**Endoscopy_UCTN_Code_CCL_1AD_2AC**

** Competing interests**

None
The authors

Margot Biscay1, Edouard Chabrun1,2, Sarah Menguy3, Elodie Cesbron-Métivier3,4, Marc Barhet2,3, Marion Marty3, Mathieu Pioche2,6
1 Department of Endoscopy and Gastroenterology, Haut-Lévêque University Hospital, Bordeaux, France
2 French Society of Digestive Endoscopy, SFED, Paris, France
3 Department of Anatomopathology, Haut-Lévêque University Hospital, Bordeaux, France
4 Department of Endoscopy and Gastroenterology, Angers University Hospital, Angers, France
5 Department of Endoscopy and Gastroenterology, Hôpital Nord, Assistance Publique des Hôpitaux de Marseille, France
6 Department of Endoscopy and Gastroenterology, Pavillon L, Edouard Herriot Hospital, Lyon, France

Corresponding author

Mathieu Pioche, MD
Endoscopy Unit – Digestive Disease Department, Pavillon L – Edouard Herriot Hospital, 69437 Lyon Cedex, France
Fax: +33-4-72110147
mathieu.pioche@chu-lyon.fr

References