

# Granulation Polyp: A Pitfall for Digital Chromoendoscopy

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## Keywords

Granulation polyp · Virtual chromoendoscopy · Colonoscopy

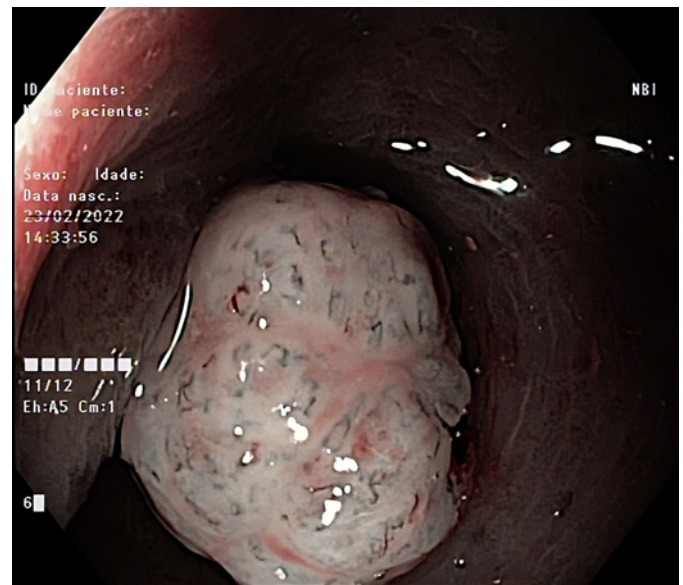
**Pólipo de granulação: uma falha da  
cromoendoscopia virtual**

## Palavras Chave

Pólipo granular · Cromoendoscopia virtual · Colonoscopia

A 71-year-old woman was referred for treatment of a sessile polyp (0-Is) in the sigmoid described as having altered crypt morphology and disrupted vascular pattern on virtual chromoendoscopy, indicative of malignancy. The endoscopic biopsies revealed no dysplasia.

We repeated colonoscopy, and a sessile polypoid lesion (0-Is) adjacent to a diverticulum with a large ostium was identified. The polyp had a pale color and a small ulceration on white-light endoscopy, measuring 12 mm (Fig. 1). Narrow Band Imaging (NBI) assessment revealed the absence of pit pattern and an aberrant vascular pattern with dilated, irregular, tortuous vessels (Fig. 2). Histological assessment (several biopsies) of the lesion revealed polypoid granulation tissue with fibrinoid necrosis, suggestive of ulceration (Fig. 3). The diagnosis of granulation polypoid tissue arising from a colonic di-



**Fig. 1.** Sessile polyp (0-Is) with approximately 12 mm located in the sigmoid. It has a pale color and aberrant vessels.

verticulum was established, and due to its benign nature, we decided not to remove it.

Granulation polypoid tissue is a rare entity with, to our knowledge, just a few case reports on the literature [1–3]. Granulation polypoid tissue could arise from a colon

diverticulum after recurrent diverticulitis and has no malignant potential, contrary to neoplasms.

These polyps are composed by inflamed granulation tissue and covered by regenerative epithelium and not by colonic epithelium, so there are no crypts on the surface [3]. Subsequently, on virtual chromoendoscopy, they have a fibrotic appearance without pit structures, which could be misinterpreted as the amorphous appearance that characterizes invasive neoplasia [1–4]. In order to differentiate these entities, one should search for other features of neoplasms, despite being nonspecific. These include the presence of an

adenomatous component at the periphery or extensive ulceration and friability [4]. Although further investigation is required, according to the similarity of endoscopic images described in the available literature [1–4], we thus speculate that a colonic polyp showing a smooth surface, lack of pit structure, a fibrotic appearance, and aberrant neo-vessels may be typical of a colonic granulation polyp.

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### Statement of Ethics

Ethical approval was not required for this study in accordance with local/national guidelines. The patient gave her written informed consent to publish this case and images.

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### Conflict of Interest Statement

The authors have no conflicts of interest to declare.

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### Funding Sources

None.

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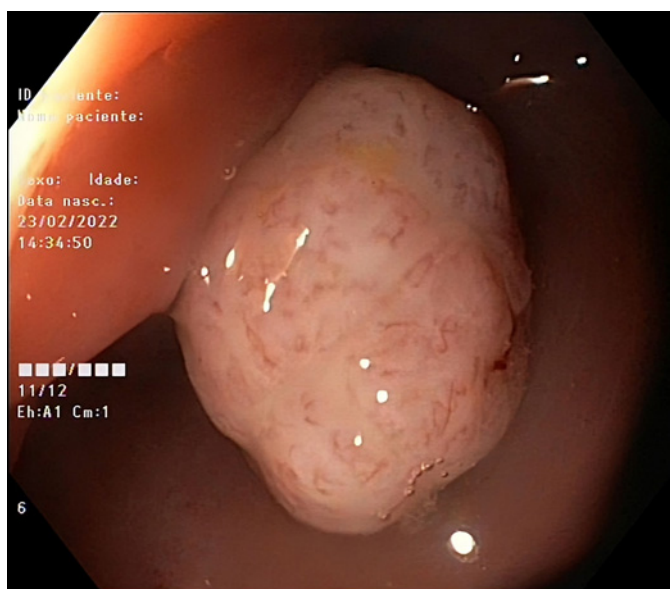
### Author Contributions

Luís Correia Gomes, Joana Lemos Garcia, and Sandra Faias were involved in the endoscopic procedure and manuscript drafting. Margarida Rajão Saraiva and Sara Mata were involved in manuscript drafting and critical revision. Isabel Claro reviewed the manuscript and gave final approval. All authors approved the final version.

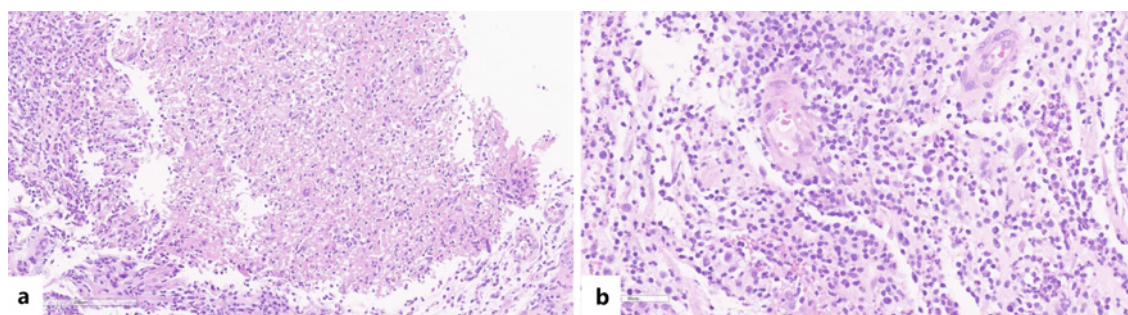
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### Data Availability Statement

All data generated or analyzed during this study are included in this article. Further inquiries can be directed to the corresponding author.



**Fig. 2.** Narrow band image (NBI) evaluation of the 12 mm sessile polyp, revealing the absence of glandular pattern with aberrant vessels, without evidence of adenomatous tissue.



**Fig. 3. a** Histological findings of biopsies of the polyp. A 10 magnified image with a hematoxylin and eosin (HE) stain, where the blue line reveals fibrinoid necrosis, typical of ulceration. No atypical cells or structural atypia. **b** Histological findings of biopsies of the polyp. A 20 magnified image with a hematoxylin and eosin (HE) stain, which reveals increased outgrowth of microvascular structures and infiltration of lymphocytes, neutrophils, and plasma cells, which indicates granulation tissue. No atypical cells or structural atypia.

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