

## An unusual case of colorectal human papillomavirus infection

A 48-year-old healthy woman presented to our hospital with a 2-week history of watery diarrhea. Sigmoidoscopy showed a white plaque at the rectosigmoid junction, with spared rectal mucosa (► Fig. 1). Histologic examination revealed squamous stratified epithelium with features of human papillomavirus (HPV) infection, without dysplasia. The polymerase chain reaction analysis confirmed the presence of HPV, genotype 61.

HPV is a group of more than 100 DNA viruses with a tropism for cutaneous and mucosal squamous epithelium. They are classified in two groups: a lower risk group, as in the case of HPV 61, and a higher risk group, associated with neoplastic lesions (e.g., genotypes 16, 18, 31) [1]. The presence of squamous metaplasia is not uncommon in the distal 4 cm of the rectum as a result of extension of the stratified squamous epithelium in the dentate line. It is rare to find this type of epithelium in the proximal rectum and colon and the cause is not known. It may be the result of proliferation of heterotopic nests of squamous cells present in the colorectal mucosal basal layer in the setting of mucosal injury, due to chronic inflammation (e.g., inflammatory bowel diseases or radiation therapy) with development of squamous metaplasia. However, there are reports of squamous epithelium being found with no associated disease [2,3]. The mechanisms underlying HPV-isolated proximal rectum and/or colon infection of

the epithelium are also unknown. Is there hematologic/lymphatic spread or does perineal diffusion of a genital infection generate the colonic infection [4]? Due to its rarity, no treatment options are mentioned in the literature, although aggressive genotypes may be offered surgical resection and lower risk lesions may be treated with the same ablative therapies used in infection of the anal mucosa.

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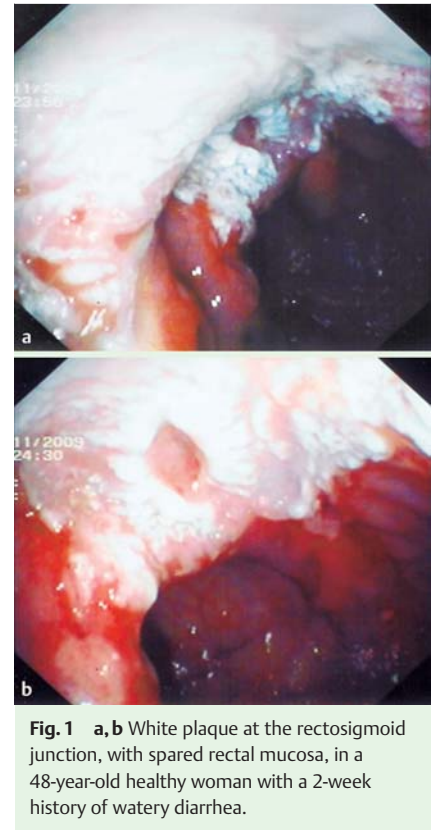
**Competing interests:** None

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### References

- 1 Zhi-Ming Z, Backer CC. papillomavirus genome structure, expression, and post-transcriptional regulation. *Front Biosci* 2006; 11: 2286–2302
- 2 Michclassi F, Mishlove LA, Stipa F et al. Squamous-cell carcinoma of the colon. Experience at the university of Chicago, review of the literature, report of two cases. *Dis Colon Rectum* 1988; 31: 228–235
- 3 Sotlar K, Koveker G, Aepinus C et al. Human papillomavirus type 16-associated primary squamous cell carcinoma of the rectum. *Gastroenterology* 2001; 120: 988–994
- 4 Lorenzon L, Ferri M, Pillozzi E et al. Human papillomavirus and colorectal cancer: evidences and pitfalls of published literature. *Int J Colorectal Dis* 2011; 26: 135–142



**Fig. 1** a, b White plaque at the rectosigmoid junction, with spared rectal mucosa, in a 48-year-old healthy woman with a 2-week history of watery diarrhea.

### Bibliography

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