Successful endoscopic full-thickness resection of intramucosal cancer with Aurora rings arising in a diverticulum

The diagnosis and treatment of polypoid lesions located in diverticula is challenging. Aurora rings – concentric rings around a polypoid lesion [1] – may indicate an origin in a diverticulum, and accordingly dedicated endoscopic treatment should be planned. Intradiverticular lesions can be treated by several endoscopic approaches [2–5]. We report the case of a polypoid lesion originating in a diverticulum with the Aurora rings sign and intramucosal cancer which was successfully resected using an endoscopic full-thickness resection device (FTRD, Ovesco, Tübingen, Germany).

A 55-year-old woman underwent colonoscopy after a positive fecal occult blood test. A 10-mm sessile polyp (Paris 0-Is) with Aurora rings was observed in the sigmoid colon (Fig. 1, Fig. 2). Because the lesion originated in a diverticulum and showed a tortuous surface pattern morphology, a single biopsy at the edge of the lesion was performed first. The biopsy revealed advanced adenoma with intramucosal cancer. Full-thickness resection using the FTRD was planned. The lesion was first marked, then it was carefully pulled into the FTRD cap using the grasping forceps. Only careful suction was performed. After ensuring that the tumor was completely inside the cap, the FTRD clip was released and the lesion was snared and resected en bloc (Fig. 3). No adverse events, early or delayed, were observed.

Histology revealed the absence of a muscular layer, confirming that the lesion was located on a false diverticulum (Fig. 4). Complete resection of a tubular adenoma with intramucosal cancer was achieved with free lateral and vertical margins (R0) (Fig. 5). Surveillance colonoscopy performed 6 months later displayed the resected area with the over-the-scope clip (OTSC) on site. Biopsies showed granulation tissue without dysplasia.

This case shows the importance of careful endoscopic observation before standard polypectomy. The identification of the subtle endoscopic sign of the Aurora rings determined the performance of safe and accurate endoscopic curative treatment using the FTRD in this patient.

Acknowledgments

We wish to thank Dr. Manuel Rodriguez-Navarro for his support in encouraging us to perform the procedure and Juan M. Herrerias-Esteban for his help in preparing the images.
Competing interests

None

The authors

Victoria A. Jimenez-Garcia1, Rafael Romero-Castro1, Masayoshi Yamada2, Juan Segura-Sanchez3, Javier Alcazar-Guijo1, Helmut Neumann4

1 Endoscopy Division, Hospital Vithas Nisa Sevilla, Seville, Spain
2 Endoscopy Division, National Cancer Center Hospital, Tokyo, Japan
3 Pathology Division, Hospital Vithas Nisa Sevilla, Seville, Spain
4 Department of Medicine I, University Hospital Mainz, Mainz, Germany

Corresponding author

Victoria Alejandra Jimenez-Garcia, MD PhD
Endoscopy Division, Hospital Vithas Nisa Sevilla, Av. Placido Fernandez Viagas s/n. 41950, Castilleja de la Cuesta, Seville, Spain
drajimenezg@hotmail.com

References


Bibliography

DOI https://doi.org/10.1055/a-1065-1517
Published online: 2019
Endoscopy
© 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

Video 1 Management by endoscopic full-thickness resection of an intramucosal cancer with Aurora rings involving a diverticulum.