Salvage endoscopic wide-field full-thickness resection of T2 rectal cancer with endoscopic submucosal dissection instruments, without defect closure

A 86-year-old woman was referred for recurrent bleeding secondary to a 4-cm cT2N0 cancer of the distal rectum (Fig. 1). Tumor staging was negative for metastasis. She had a history of severe aortic stenosis and atrial fibrillation under anticoagulants, making her a poor candidate for surgical treatment by total mesorectal excision. After a multidisciplinary approach and informed patient consent, we performed a palliative endoscopic resection of the tumor by means of endoscopic submucosal techniques under propofol sedation (Video 1).

After circumferential muscular incision (Fig. 2, Fig. 3), the specimen was progressively dissected from the perirectal fat using a square tip endoscopic submucosal dissection (ESD) knife (Square-Knife, Endoaccess, Garbsen, Germany) in spray coagulation mode (Effect 3.0, VIO3, ERBE, Tübingen, Germany). Large perirectal vessels were coagulated with hot biopsy forceps. No major bleeding...
was encountered. At the end of the procedure, which lasted 80 minutes, the hemi-circumferential wall defect was left open (▶ Fig. 4, ▶ Fig. 5), since this approach has been demonstrated to be safe after surgical local resections [1]. The patient received broad spectrum antibiotics and a liquid diet for 1 week. She was hospitalized for 2 days and had an uneventful recovery. Endoscopy 1 month later confirmed complete wound healing and the patient received local radiotherapy. At 2 years of endoscopic and radiologic follow-up, she remains asymptomatic without evidence of local recurrence or distal metastasis on imaging and endoscopy.

In conclusion, we presented an endoscopic salvage resection of a symptomatic T2 rectal cancer in a patient who was a poor candidate for transabdominal surgery. Local excision is an acceptable treatment for T1N0 early rectal cancer, however there is limited data for high-risk T1 and T2 tumors [2, 3]. In a meta-analysis, pT1/pT2 rectal cancers treated with local excision and adjuvant (chemo)radiotherapy were associated with a 14% local recurrence rate and 9% distant recurrence [4]. Although this approach cannot be generalized, we demonstrated the feasibility of endoscopic excision in highly selected cases.

Endoscopy_UCTN_Code_TTT_1AQ_2AD

Competing interests

The authors declare that they have no conflict of interest.

The authors

Georgios Mavrogenis1, Dimitrios Ntouarikis2,3, Neoklis Kritikos3, Panagiotis Kasapidis4, Loukas Kaklamannis4, Vassilis Kouloulias5, Fateh Bazerbachi6

1 Unit of Hybrid Interventional Endoscopy, Department of Gastroenterology, Mediterraneo Hospital, Athens, Greece
2 School of Medicine, European University Cyprus, Nicosia, Cyprus
3 Department of Surgery, Mediterraneo Hospital, Athens, Greece
4 Department of Pathology, Mediterraneo Hospital, Athens, Greece
5 Department of Radiotherapy, Mediterraneo Hospital, Athens, Greece
6 CentraCare, Interventional Endoscopy Program, St. Cloud Hospital, St. Cloud, Minnesota, USA

Corresponding author

Georgios Mavrogenis, MD
Unit of Hybrid Interventional Endoscopy, Department of Gastroenterology, Mediterraneo Hospital, Ilia 8–12, Glyfada 166 75, Greece
mavrogenis@gmail.com

References