Two en bloc circumferential endoscopic resections of synchronous esophageal neoplasms: a reality even in the West

A 50-year-old man with oropharynx cancer (T3N0M0) underwent upper gastrointestinal endoscopy to search for synchronous lesions. Endoscopic examination identified two synchronous extensive flat lesions (T0-IIb) in the esophagus: lesion A – a 5-cm lesion, occupying 75% of the circumference, located between 16 and 21 cm from the incisors; lesion B – a 5-cm circumferential lesion, located between 26 and 31 cm from the incisors. The intrapapillary capillary loop classification was suggestive of type V3. Endoscopic ultrasound revealed neither submucosal invasion nor locoregional lymphadenopathies. Following multidisciplinary evaluation, endoscopic submucosal dissection (ESD) was planned (▶Video 1).

On account of the distance between the lesions, separate circumferential excision assisted by endoscopic submucosal tunnel dissection (ESTD) was performed using a FlushKnife (Fujifilm Corp., Tokyo, Japan). Circular incisions were completed at the anal and oral margins, and ESTD was accomplished from the oral to the anal side creating two submucosal tunnels in the proximal lesion and three submucosal tunnels in the distal lesion (larger esophageal lumen) (▶Fig. 1). Submucosal dissection was completed and separate en bloc resections were achieved (▶Fig. 2, ▶Fig. 3).

The procedure took 270 minutes and the patient was discharged 48 hours after the procedure under oral prednisolone. Pathological analysis revealed a well-differentiated squamous cell neoplasia (SCC), without lymphovascular invasion; the tumor was intramuscular and resection was complete in lesion A but submucosal invasion with positive vertical margins were present in lesion B. After multidisciplinary evaluation, chemoradiotherapy for both esophageal and oropharyngeal neoplasms was performed.

Three months later, the patient refused endoscopic re-evaluation but there was no unequivocal dysphagia. ESD is a well-established treatment for superficial esophageal SCC. However, for large circumferential lesions, ESTD has a more rapid dissection speed and higher R0 resection rate compared with conventional ESD [1–2]. Although widely performed in Asia, only a few cases have been described at Western centers [3–4]. To the best of our knowledge, this is the first report of ESTD for two synchronous circumferential SCCs in a Western center.

E-Videos

▶Video 1 Endoscopic submucosal tunnel dissection for the treatment of synchronous esophageal neoplasms.

▶Fig. 1 Submucosal tunnels were created covering the whole esophageal lumen.

▶Fig. 2 Ulcers were reassessed without muscular injury or bleeding.

Competing interests

None
The authors

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References


Fig. 3 Complete circumferential en bloc resection of esophageal lesions. a The distal lesion. b The proximal lesion.