Coexistence of esophageal squamous cell carcinoma and leiomyoma: a case report

Özofagus yassi hücreli karsinomu ile leiyomiyom birlikteliği: Olgu sunumu

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Benign tumors of the esophagus are rare lesions. Leiomyomata are the most common benign tumors of the esophagus and usually present with a single lesion. Coexistence of esophageal squamous cell carcinoma and leiomyoma are extremely rare. In this article, we present a 44-year-old male case who was admitted with weight loss and dysphagia with normal physical examination and laboratory findings, however, diagnosed with the coexistence of esophageal squamous cell carcinoma and leiomyoma, based on the histopathological examination.

Key words: Carcinoma; esophageal neoplasms; leiomyoma.

There have been only a few case reports regarding the coexistence of esophageal squamous cell carcinoma (SCC) and leiomyoma.1,2 Leiomyoma is most oftenly benign and is commonly found in the mesenchymal tissue. It generally involves solitary submucosal tumors (SMTs) of the esophagus.3-5 Here we present a case that underwent surgery due to SCC and was postoperatively diagnosed with coexistent esophageal leiomyoma.

CASE REPORT

A 44-year-old male with symptoms of weight loss and dysphagia that had begun two months earlier was referred to our hospital in March of 2009. He worked in a sugar factory and was a nonsmoker. His physical examination findings and general laboratory investigations were within the normal ranges. Due to the presence of dysphagia, an endoscopic examination was performed, and a tumoral mass with a partially irregular surface in the distal third of the esophagus was identified. Subsequently, a specimen for histopathological evaluation was obtained (Figure 1). The examination of the specimen revealed SCC. Contrast-enhanced computed tomography (CT) of the thorax and abdomen showed minimally diffuse esophageal wall enlargement in a 5 cm segment of the distal esophagus with no lymph node involvement or distant metastasis.

The patient underwent a distal esophagectomy and an esophagogastrectomy together with a laparotomy and thoracotomy (Ivor-Lewis approach). Postoperatively, the pathological findings of the resected specimen revealed SCC infiltrated to the submucosa (2 cm in diameter) and two separated leiomyoma nodules in the submucosa along with five reactive and three metastatic lymph nodes.

There were no problems during the nine-month follow-up period after the surgery, and the patient had no sign of pathology seen on control thorax CT.
DISCUSSION

The coexistence of esophageal SCC and leiomyoma is very rare, and this is usually detected following surgery. An esophagoscopy is normally used for the differential diagnosis of esophageal leiomyoma and carcinoma. Because esophageal leiomyomata are submucosal lesions, conventional endoscopy does not always lead to an accurate diagnosis.\(^3,6,7\) The recent availability of endoscopic ultrasonography (EUS) provides an advantage in detection and even the management of these tumors as it clearly reveals the five-layered structure of the gastrointestinal wall.\(^1\)

Optimum treatment options including the type of surgery needed for leiomyoma is controversial, but the curative treatment for esophageal SCC is resection combined with anastomosis. However, resection of the leiomyoma is only recommended in symptomatic patients, whereas observation is recommended for asymptomatic patients with lesions smaller than 5 cm and for cases in which the preoperative evaluations exclude malignancy.\(^8\) Although malignant transformation of the leiomyoma is possible, malignancy can only be ruled out by resection.\(^9,10\) The coexistence of esophageal SCC and leiomyoma shows two different types. In the overlying type, the carcinoma covers the benign SMT, and in the separate type, the carcinoma and the benign SMT are separate entities. Generally, most SMTs in the separate category are tiny leiomyomata that are discovered only during the postoperative examination of pathology specimens after an esophagectomy for esophageal SCC.\(^10,11\) This was the case with our patient.

In our case, the esophagoscopy revealed an ulcerative mucosal lesion over the elevated lesion, and the biopsy showed that the lesion was an SCC. In our clinic, EUS is not available, so after the general investigations that were mentioned above, dissection of the distal esophagus with esophagogastric anastomosis was performed along with a laparotomy and thoracotomy (Ivor-Lewis approach).

In recent years, EUS has emerged as a valuable tool and has been recommended for the preoperative staging of the tumor and to assist in the planning of the surgery. However, in our case, even if EUS had been utilized, the same surgical approach would have been needed due to the coexistence of esophageal SCC.

In conclusion, in the management of esophageal malignancies, preoperative evaluations are crucial. Examinations using EUS are especially informative as they make it possible to detect tumor size and margins. They can also be used to discover the tumoral invasion of the esophageal wall along with the coexistence of SMTs with SCC. It must kept in mind that esophageal carcinomas may coexist with SMTs.

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