Squamous Cell Carcinoma of the Esophagus and Adenocarcinoma of Gastroesophageal Junction, a Rare Coincidence

B Geramizadeh1,2*, A Safari2, F Javadi2, Sh Bolandparvaz3,4

1Transplant Research Center, 2Department of Pathology, 3Trauma Research Center, 4Department of Surgery, Shiraz University of Medical Sciences, Shiraz, Iran

Abstract

Simultaneous squamous cell carcinoma (SCC) of esophagus and gastroesophageal adenocarcinoma has rarely been reported. It is often difficult to diagnose this coexistence preoperatively due to the presence of esophageal stenosis. Herein, we report a patient with esophageal SCC whose gastroesophageal adenocarcinoma was also detected after pathologic examination of the resected specimen.

Keywords:

Introduction

The simultaneous presence of esophageal squamous cell carcinoma (SCC) and gastric adenocarcinoma is very uncommon. There are rare case reports in the English literature.1

In this report, we present our first experience (during 20 years) of an 80-year-old man with esophageal SCC in which gastroesophageal adenocarcinoma was incidentally detected after surgery in the margin of surgical resection.

Case Report

An 80-year-old man presented with progressive dysphagia, weakness and weight loss since 5 months prior to admission. His past medical history was completely unremarkable. Physical examination showed a cachectic and pale old male. Heart, lung and other parts of the body were unremarkable. Laboratory findings were: WBC: 3400/ml, Hb: 7.3 gr/dl, platelet: 190000/ml. Occult blood was detected in the stool examination. Upper gastrointestinal endoscopy showed an ulcerative infiltrative mass in the lower third of esophagus. The lumen of the esophagus was narrowed by the tumor so that the tube could not be passed through stomach. A biopsy was taken with the pathologic diagnosis of well differentiated SCC.

CT scan of the chest and abdomen did not reveal any additional finding without any evidence of metastasis. The patient underwent surgery for resection of the tumor, and distal esophagectomy (Orringer's operation) was performed. The specimen received in the pathology laboratory consisted of a segment of esophagus with an ulcerated infiltrative mass measuring 5X3x2.5 cm which has nearly obliterated the lumen with 2-cm distance from the distal resected margin of cardia which grossly seemed unremarkable except for mild firmness. Grossly, no overt mass was detected in the stomach.

Microscopic analysis of the sections from the esophagus showed well differentiated SCC invading the adventitia (Figure 1A). The distal surgical resection margin of gastroesophageal junction showed well differentiated adenocarcinoma with focal invasion to the superficial muscularis properia (Figure 1B). There was normal esophageal mucosa between the two tumors, so these two tumors were completely separate. No lymph node metastasis of either SCC or adenocarcinoma was identified.
Unfortunately after resection of the esophagus, the patient developed pneumothorax and with the diagnosis of air leak and right main bronchus rupture, emergency right postrolateral thoracotomy performed and chest tube was inserted but the patient did not tolerate and died after cardiorespiratory arrest.

Discussion

Esophageal cancer is the 8th most common cancer and the sixth most common cause of death from cancer worldwide.\(^2\) SCC is the predominant histologic picture, but its coincidence with gastroesophageal adenocarcinoma has rarely been reported.\(^4\) Synchronous cancer was defined as a primary carcinoma of the extragastric organs detected within 1 year of the diagnosis of esophageal carcinoma based on the criteria reported by Warren and Gates.\(^6\)

In a report from Japan, with a high incidence of both esophageal SCC and gastric adenocarcinoma, just 2.1% of 11732 patients with esophageal SCC, had synchronous cancers of other organs, the most common of which had been gastric early adenocarcinoma,\(^7\) but in Western countries, the most common synchronous cancer with esophageal SCC were from oral cavity, larynx and pharynx.\(^8\) However, incidental finding of adenocarcinoma of gastroesophageal junction during surgery of esophageal SCC has very rarely been reported.\(^9\)\(^10\)

All the previously reported cases have been in old male patients (>60 years of age). Diet, cigarette smoking and alcohol consumption have been considered as the main risk factors of this coincidence.\(^3\) Our patient has been a heavy cigarette smoker for more than 50 years but without any history of alcohol consumption. The most common presentation in previous cases was dysphagia and abdominal discomfort, such as our patient.

The main therapeutic strategy in these cases was surgical exploration and excision of both tumors with postoperative adjuvant chemoradiation,\(^11\) which was not possible in our patient because of the lack of diagnosis of the second cancer before surgery and the patient's death shortly after surgery.

Based on our experience in this report, we want to stress on the importance of detailed preoperative gastrointestinal examination and of careful intraoperative inspection of gastric mucosa in patients with esophageal cancer whose preoperative gastrointestinal examination provides inconclusive results due to the presence of severe esophageal stenosis.

**Conflict of interest:** None declared.

**References**


