

Multicentric tumor of the esophagus and its clinical significance ; case report and review of the literature

F. H. Dilek¹, İ. Yalcınkaya², O. N. Diİlek³, N. Akpolat⁴

(1) Kocatepe University, School of Medicine, Departments of Pathology and (3) General Surgery, Afyon, Turkey ; (2) Yüzüncü Yıl University, School of Medicine, Departments of Chest Surgery and (4) Pathology, Van, Turkey.

Abstract

Simultaneous occurrence of the esophageal tumor at multiple sites in a single patient is unusual. Here in, we described a patient had three separate tumoral nodules with ulceration of the esophagus. Thorax CT scan, X-ray and endoscopy revealed the only two tumoral lesion at the lower esophagus. But, the other tumoral lesion at the upper part of the esophagus was detected at operation and histopathologic examination. The aspect of treatment was changed according to this new condition during the operation. We discussed the multicentric tumoral lesions of the esophagus in view of the literature. (*Acta gastroenterol. belg.*, 2001, 64, 321-323).

Key words : esophagus, tumor, multicentric.

Case report

A 46-year-old Turkish man was admitted to our hospital with a complaint of mild dysphagia. A barium esophagogram showed an annular narrowing in the lower esophagus. Further, two ulcerated mucosal lesions of the esophagus about 28 cm and 37 cm anal to the incisor were detected by endoscopically. The tumor in the cervical esophagus which had occurred synchronously but had unfortunately escaped detection before the operation. Unfortunately, we could not perform detailed mucosa and lymphoid tissue screening for T and N staging, because we had no endosonographic tools. The surgeons had planned to perform partial esophagectomy and intrathoracic esophagogastric anastomosis but they must have converted to subtotal esophagectomy for this new additional cervical lesion during the operation (Fig.1 and 2). The specimen macroscopically showed four elevated round nodule with ulceration. Distances of nodules were 5,2 cm, 3,3 cm and 1.2 cm on the proximal to distal. Detailed histopathological examination of serial blocks and subserial sections of the entire resected esophagus indicated that tumoral nodules were well differentiated squamous cancer and separated with the whole thickness of esophageal wall that was normal. Histological depth of cancer invasion varied from the submucosa to the adventitia. Postoperative period and follow up period for 14 months are uneventful.

Discussion

Esophageal carcinoma occurs in any portion of the esophagus. Squamous cell carcinoma of the esophagus

appears mainly as an isolated tumor, frequently diagnosed in its latest stage. However, current advances in endoscopy, systematically used for high risk subjects, allow the detection of very early lesions such as epithelial dysplasia or in situ carcinoma. The tumor is seen to invade part or all of the muscular layer, from which it may extend into the surrounding soft tissue and trachea, but if intraluminal growth occurs, it may lead to total obstruction. Submucosal spread, not appreciable grossly, is also common, sometimes up to 5 or more centimeters beyond the gross margins of the tumor. In some cases, separate tumor nodules are seen in the wall of the esophagus or stomach (intramural metastases) (1). Maeta *et al.* divided the multiple esophageal lesions to two groups with respect to the histological depth of cancer invasion. One is multiple primary lesions were all confined within the submucosal layer, while intramural metastatic lesions varied from the submucosa to adventitia (2). Our case was accepted as intramural metastatic lesion with its histopathologic findings.

Maeta *et al.* reported that multiple primary lesions may be associated with a possible increased multicentric carcinogenic potential in the non-cancerous epithelium of the esophagus of patients who have had an antecedent esophageal cancer, and intramural metastasis are also developed by intramural lymphatic spread from the primary esophageal cancer (2). Takubo *et al.* reported lymph node and distant organ metastasis were significantly lower in the patients without intramural metastasis. They also emphasized 70% of intramural metastasis on the proximal side was detected during preoperative clinical examination and the presence of intramural metastasis is also an important factor for preoperative and postoperative evaluation of the diagnosis of patients with esophageal squamous cell carcinoma (3). Witt *et al.* reported that multicentric disease within the esophagus was found in seven patients (36%) in the adenocancer group (n : 19) (4).

The multicentric occurrence of tumors of the upper aerodigestive tract has been well described, with an incidence ranging from 5 to 16 percent. Gluckman *et al.* confirmed the high incidence of multicentric carcinomas in the upper aerodigestive tract, lung, and esophagus.

Correspondence address : Dr. F. H. Dilek, M.D., PK :70 03100 Afyon, Turkey.
E mail : ondilek@aku.edu.tr

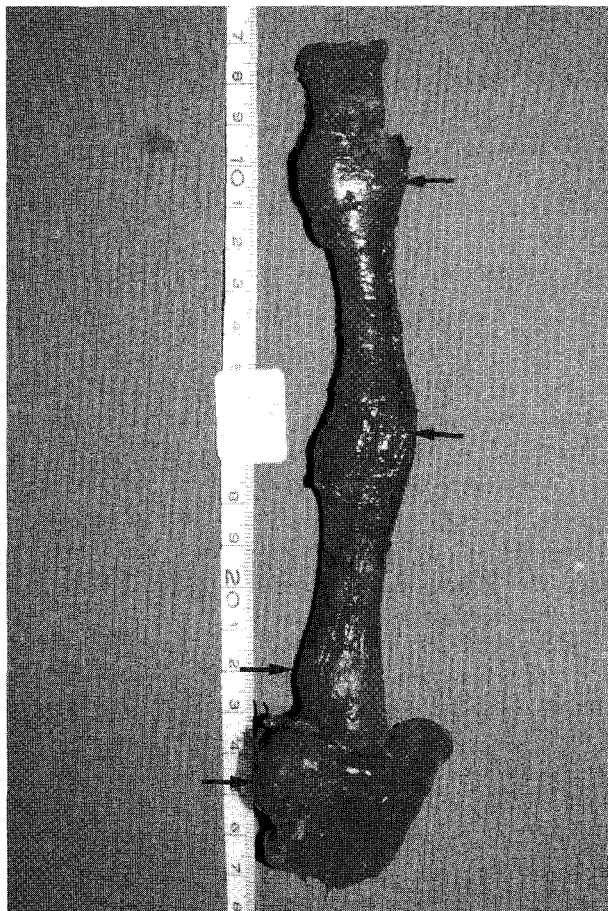


Fig. 1. — Resected specimen of the esophagus and external appearance of the tumoral lesions (arrows).

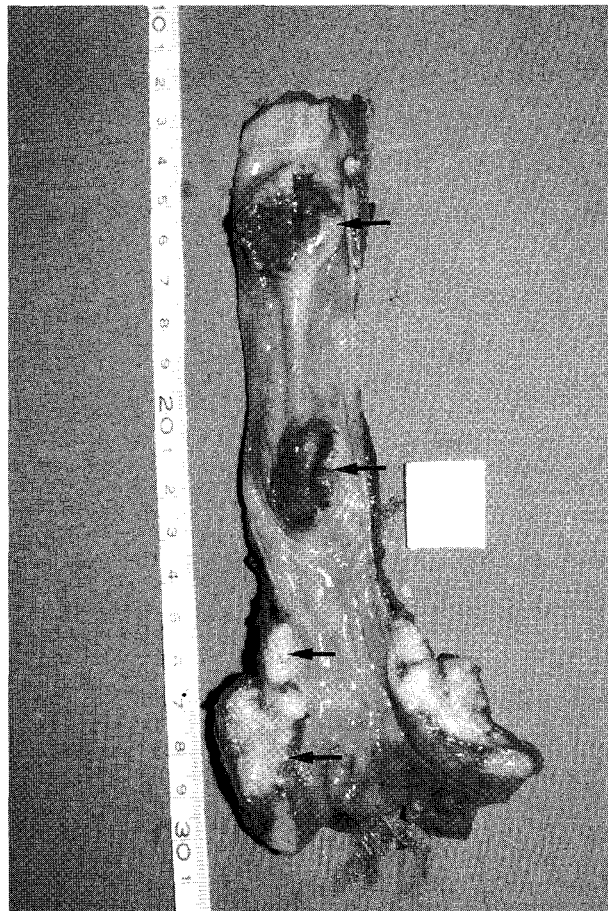


Fig. 2. — Longitudinal section and macroscopically appearance of ulcerated tumoral nodules.

They reported the clinical significance of this phenomenon particularly effects on patient survival and increasing relationship to local tumor recurrence. They also stressed the value of routine panendoscopy (barium swallow, esophagoscopy and bronchoscopy with brochial washing) in the initial assessment as well as the need for a lifelong follow-up of these patients (5). Due to the high incidence of other multicentric neoplasma or metastatic skip lesions accompanying esophageal carcinoma, careful evaluation during preoperative examinations in order to avoid overlooking another lesion, especially in the cervical portion of the esophagus is imperative. Detection of a synchronous primary tumor at the time of initial work-up is crucial both for management and final outcome. Endosonography should be considered the imaging method of choice for the pretherapeutic evaluation of patients with esophageal cancer. Many reports in the literature demonstrate superior ability to determine the depth of tumor infiltration (T stage) and also assess regional lymph adenopathy (6,7).

In conclusion, an increasing number of patients presenting with esophageal tumor problems in the world is seen in hospital and private practice. It is therefore very important to be able to recognise the different clinical aspects of these patients. Unrecognised additional



Fig. 3. — It shows that moderately to well differentiated invasive squamous cell carcinoma beneath the epithelium.

esophageal tumoral nodules may lead to fail of the treatment and high morbidity and mortality rates. Care should be taken to detect the additional malign lesion at the esophagus preoperative period and during the operation. It is also emphase the need for careful attention to the choice of margins during the surgical resection of the esophagus.

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