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Case Report

Esophageal carcinoma with acro-metastasis: a rare case report

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ABSTRACT

The aim of this case report was to present a rare case of bony metastases originated from squamous cell carcinoma of the mid esophagus, thus, underline the need for early diagnosis and possible treatment of suspicious bony lesions among patients with esophageal malignancy. A 35-year-old man with esophageal carcinoma underwent esophagectomy whose pathology revealed stage III-C disease. During follow up, he was diagnosed to have bony hand metastasis. The patient died after some time. Therefore, follow-up of patients who are diagnosed with esophageal malignancy and underwent esophagectomy is mandatory in order to reveal early surgical stages as esophageal cancer is emerging as leading cause of cancer mortality worldwide. Complete resection of esophageal cancer and adjacent malignant lymph nodes is the only potentially curative treatment. Accurate preoperative staging and assessment of therapeutic response after neoadjuvant therapy are crucial in determining the most suitable therapy and avoiding inappropriate attempts at curative surgery.

Keywords: Esophagectomy, Metastasis, Squamous cell carcinoma, Oncology

INTRODUCTION

Esophageal cancer is one of the deadliest cancers with a lifetime risk of about 0.8% for men and 0.3% for women. Incidence of esophageal cancer is 13 cases per 1,00,000 population for black American men. On the whole it is the sixth commonest cause of cancer related deaths in the world.[1] Two major risk factors for esophageal adenocarcinoma are gastro-esophageal reflux disease (GERD) and Barrett's esophagus (BE). Cancer of the esophagus typically occurs in one of two forms, SCCs arising from the stratified squamous epithelial lining of the organ, and adenocarcinomas affecting columnar glandular cells that replace the squamous epithelium.[2] SCC is the predominant histologic type of esophageal cancer worldwide. The incidence of squamous cell cancer of the esophagus increases with age as well and peaks in the seventh decade of life. The incidence of SCC of the esophagus has been found to dramatically increase in the presence of any factor that causes chronic irritation and inflammation, such as excessive alcohol intake, especially in combination with smoking.[3,4]

CASE REPORT

A 35 years old male, presented to our oncology department with the history of dysphagia for solids and liquids and weight loss for two and half months. He underwent surgical laparotomy, thoracotomy and esophagectomy. Histopathology was done, which revealed moderately differentiated squamous cell carcinoma with the size of 5.5×3.5 cm, tumor infiltrated muscularis propria and adventitia with the proximal margin of 1.6 cm and distal margin of 5 cm. Lymph nodes were 0/9. Tissue from bronchial wall was also positive for tumour. Staging was also done showing stage III-C. Radiation therapy was

planned and 5800 cGy was given in one month. He then developed pain in his right thumb with restricted movements. X-ray of right hand was done, which showed bony metastatsis in head and distal shaft of first metacarpal. CT-scan of chest was also done for confirmation of lung metastasis.

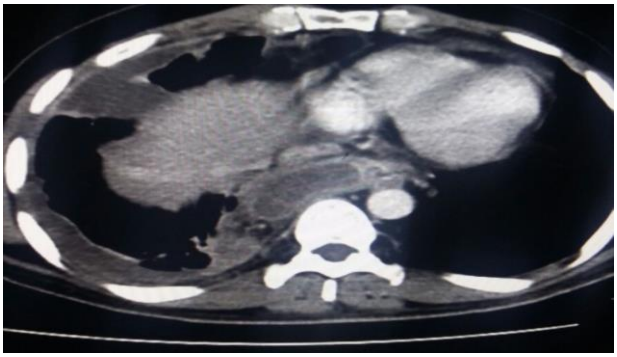

Figure 1: Pre-surgical CT-scan chest with contrast shows lesion in esophagus with pleural thickening in right hemithorax.

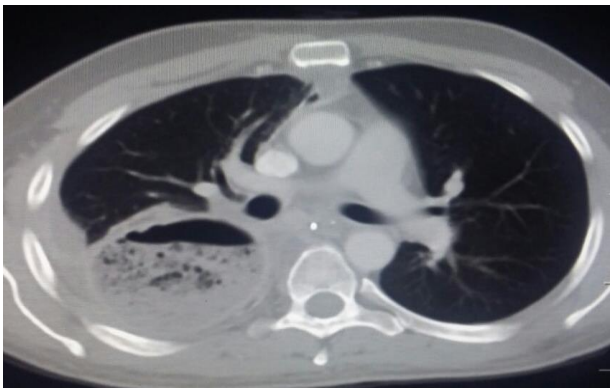

Figure 2: Postsurgical CT-scan chest bone window settings showing surgical staple in posterior mediastinum due to esophgectomy and gastric pull through.

Figure 3: Radiograph of right hand showing lytic lesion in head and distal shaft of first metacarpal bone.

DISCUSSION

Esophageal cancer is a devastating disease. Although some patients can be cured, the treatment for esophageal cancer is protracted, diminishes quality of life, and is lethal in a significant number of cases. The principal histologic types of esophageal cancer are squamous cell carcinoma and adenocarcinoma. As squamous cells line the entire esophagus, squamous cell carcinoma can occur in any part of the esophagus; it often arises, however, in the upper half of the esophagus. Adenocarcinoma typically develops in specialized intestinal metaplasia (Barrett metaplasia) that develops as a result of GERD; thus, adenocarcinoma typically arises in the lower half of the distal esophagus. The most common presenting symptom of esophageal cancer is dysphagia. Esophagogastroduodenoscopy allows direct visualization and biopsies of the tumor, while endoscopic ultrasonography is the most sensitive test for determining the depth of penetration of the tumor and the presence of enlarged peri-esophageal lymph nodes. In patients who appear to have localized esophageal cancer, positron emission tomography (PET) scanning may be useful as part of the baseline staging. Other imaging studies may be valuable in selected patients. The progression of Barrett metaplasia to adenocarcinoma is associated with several changes in gene structure, gene expression, and protein structure.[5-7] The onco-suppressor gene TP53 and various oncogenes, particularly Erb-b2, have been studied as potential markers. Casson and colleagues identified mutations in the TP53 gene in patients with Barrett epithelium associated with adenocarcinoma.[8]

CONCLUSION

Survival in patients with esophageal cancer depends on the stage of the disease. Squamous cell carcinoma and adenocarcinoma, stage-by-stage, appear to have equivalent survival rates, therefore, considering the rarity of metastatic disease to the bone from adenocarcinoma of the gastroesophageal junction, we emphasize the importance of the follow-up of patients who have been treated for primary esophageal malignancy. Constant awareness and concern of the physician is required. Every high-risk skin lesion has to be revealed and removed. Such specimens should be biopsied and histo-pathologically evaluated. Further knowledge is required in the field of the diagnosis and the options of treatment of metastatic disease from esophageal carcinomas.

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