

Squamous cell carcinoma of esophagus presenting as bone metastases in five cases

*Rezaee H. MD¹, Bradaran Rahimi M. MD²

^{1,2}Associated professor of radiology-University of Medical science of Mashad

Abstract

Introduction: Esophageal carcinoma rarely metastasizes to the bone. The objective of the current study was to report five cases of esophageal carcinoma which first presented with bone metastases.

Material and Methods: From January 1987 to June 2001, 550 patients with esophageal cancer were admitted to the Department Radiology of Ghaem Hospital for barium swallow, CT scan, sonography and plain radiographs. In five patients (three men, two women) first symptoms were bone pain and swelling due to metastasis. Radiographs and CT scan of specific bones were taken for diagnosis. Biopsy confirmed the diagnosis of squamous cell carcinoma metastases to bone. The primary site of malignancy was unknown at the time of presentation. Further evaluation including barium swallow, proved squamous cell carcinoma of esophagus that metastasized to the bones.

Results: Five patients with esophageal carcinoma (age range, 24–60 years; mean age, 45 years) Two patients showed solitary metastasis, and three patients had multiple metastases. Pelvis, cervical vertebrae, ribs, tibia and femur were involved. Patterns of bony destruction were lytic and in one patient was mixed (osteolytic-osteosclerotic). Two patients had cortical metastases simulating a primary bone tumor. The mean interval between skeletal metastasis and the appearance of dysphagia was two months.

Conclusion: Bone metastases are very uncommon at initial presentation in patients with esophageal carcinoma, but Patterns of bony destruction in esophageal carcinoma were predominately lytic and rarely sclerotic.

Key words: Esophageal cancer, Bone metastasis, Cortical metastasis

Introduction

Difficulty in swallowing is the most typical and also the earliest symptom of esophageal carcinoma. The other clinical features are retrosternal pain on swallowing, regurgitation of swallowed food, dysphonia, weight loss and anorexia (1). An extremely unusual condition is bone pain or swelling due to bone metastasis without complaints of localized esophageal symptoms.

To our knowledge only one report has been published in English literature with such complaints (2).

Five cases here reported are unique because first symptoms were bone pain and swelling due to metastases of esophageal carcinoma. Also we reported the radiological features of bone metastasis of esophageal carcinoma.

Material and Methods

From January 1987 to June 2001, 550 patients with esophageal cancer were admitted to the Department of Radiology of Ghaem Hospital

*Address: Department of Radiology of Ghaem Hospital, Ahmadabad Street, Mashad, Iran
Email: H-rezaee@mums.ac.ir
Acceptation date: 84/12/18 Confirmation date: 85/9/3