

Epidemiology of upper gastrointestinal cancers in Iran: A sub site analysis of 761 cases

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Abstract

AIM: To define the sub site distribution of upper gastrointestinal cancers in three provinces of Iran.

METHODS: The study was carried out in three provinces in Iran: Ardabil, Golestan, and Tehran. In Ardabil and Golestan, the data was collected from the sole referral center for gastrointestinal cancers and the local cancer registry. For Tehran province, data from two major private hospitals were used. All gastric and esophageal cancer patients diagnosed during the period from September 2000 and April 2002 were included in the study.

RESULTS: A total of 761 patients with upper gastrointestinal cancers were identified, 314 from Ardabil, 261 from Golestan, and 186 from Tehran. In Tehran, the relative rate of cancer increased from the upper esophagus to the distal stomach. In Golestan, the reverse pattern was observed. In Ardabil, the mid portion (distal esophagus and proximal stomach) was involved most frequently.

CONCLUSION: There were considerable variations in the sub site of upper gastrointestinal cancers in the three provinces studied. We cannot provide any explanation for this variation. Further research aimed at explaining the discrepancies in sub site distribution of upper gastrointestinal cancers may help identify important risk factors.

INTRODUCTION

Gastric cancer is the third most common malignancy worldwide^[1]. According to a recent report by Iran's ministry of health, cancer is the third most common cause of mortality, constituting 14% of all deaths in Iran. Upper gastrointestinal (GI) cancers cause 55% of all cancer-related deaths in Iran, with gastric cancer being the most common. Gastric cancer accounts for nearly 50% of all GI cancers^[2]. The incidence of squamous cell carcinoma of the esophagus and cancer of the stomach are very high as compared to their incidence in western countries^[3,4].

A major problem in classifying upper GI cancers is the lack of a universally accepted and clearly reproducible anatomic landmark separating the gastric cardia from the distal esophagus. Even when the landmarks are defined, cancer frequently destroys the anatomy to the extent that the landmarks become unrecognizable. Therefore, misclassification of gastric cancer occurs frequently^[5,6].

Recently, several studies have indicated an increase in the incidence of adenocarcinoma of the distal esophagus compared to cancer of the gastric cardia in western countries. These studies postulate that a significant proportion of adenocarcinomas of the distal esophagus may have been misclassified as cancer of gastric cardia, leading to the apparent increase in cardia cancer^[7,8].

In view of recent recognition of the importance of the sub site involvement in upper GI cancers, we aimed to examine the sub sites of upper GI cancers in Tehran and two provinces in north Iran.