

ESOPHAGEAL CANCER

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Introduction

Esophageal cancer is a common cancer which has poor prognosis with a five year survival of less than 15%. Although squamous cell cancer is the most common histologic subtype, adenocarcinoma is increasing rapidly.

This manuscript will present the epidemiology and risk factors of esophageal cancer and review early detection and prevention of related issues.

Epidemiology

Esophageal cancer ranks 6th among cancers worldwide (constitutes 5.7% of all cancer mortality). It does increase with age with peak between age 50 – 70. (Globocan 2002). Esophageal cancer is more common in male; with male to female ratio of 3-5:1.

Risk Factors

Smoking and Alcohol

Smoking and alcohol are major risk factors for esophageal cancer (UTD 14 – 15).

Smoking does not only increase the risk of squamous cell carcinoma but also increase the risk of adenocarcinoma especially in patients with Barretts esophagus as the risk is about 2.4 times higher than non smokers (UTD 13).

Gastroesophageal Reflux and Barrett's Esophagus

Gastroesophageal reflux is a major risk factor for adenocarcinoma as the risk of esophageal cancer increases significantly in patients with GE reflux. The odd ratio of having esophageal cancer is more than 7 times for patients with reflux symptoms which may increase to more than 40 times if the symptom is long standing for more than 20 years (79-80).

Underlying Esophageal Diseases

Such achalasia and caustic esophageal injury increases the risk of esophageal cancer (43, 44).

Obesity and Dietary Risk Factors

Eating or drinking hot food or drinks may cause increase in the risk of esophageal cancer e.g. hot tea (29), food that contains U-nitroso may increase the risk of esophageal cancer so is the consumption of Betel nuts.

Furthermore, low selenium and zinc diets have been implicated in increasing the risk of esophageal cancer. Obesity with BMI between 25 – 30 kg/m² increase the odd ratio of esophageal cancer by 1.5 and if the BMI was more than 30 kg/m², the odd ratio increased to 2.7 (83,84).

Medication Use

The use of oral biphosphenate and medications that decrease the lower esophageal sphincter (e.g. nitroglycerine, aminophyllin) increase the risk of esophageal cancer.

Presenting Sign and Symptoms

The symptoms of esophageal cancer result from the obstructive lesion that causes dysphagia especially of the solid food, odynophagia, regurgitation, etc. These may lead into anorexia and weight loss.

Patient may develop respiratory symptom due to aspiration or tracheoesophageal fistula. Chronic blood loss or frank bleeding will lead to anemia and its associated symptoms.

Screening

There is no study demonstrated the value of mass screening for esophageal cancer.

Management of Esophageal Cancer

Early esophageal cancer is managed by surgical resection and combined multidisciplinary treatment with radiation therapy and/or chemotherapy.

Advanced stages are usually non curable and the goal of care will be to alleviate the obstructive symptoms.

Prevention

Avoidance of alcohol and smoking is paramount to decrease the risk of esophageal cancer. Treating esophageal reflux would help to increase fiber intake may have protective value.

Esophageal Cancer Prevention

Primary Prevention

- Avoid smoking and alcohol consumption.
- Treat esophageal reflux.

Public Screening

- No evidence of benefit for public screening.

Reference

1. *Globocan 2002: <http://www.dep.iarc.fr>*