Esophageal cancer: associated factors with special reference to the Kashmir Valley

Sabha Rasool¹, Bashir A Ganai¹, A Syed Sameer², and Akbar Masood¹

¹Department of Biochemistry, University of Kashmir, Hazratbal, Srinagar, Kashmir; ²Department of Biochemistry, Medical College, Sher-I-Kashmir Institute of Medical Sciences, Bemina, Srinagar, Kashmir, India

ABSTRACT

Esophageal cancer is one of the most common cancers worldwide. It is a multifactorial disease, and no single agent has been identified so far as the sole cause of the cancer. Many factors like smoking, the consumption of alcohol, fungal-contaminated, spicy and various nitrosamine-containing food stuffs and hot beverages, nutritional deficiency of some vitamins like β-carotene, vitamin A, C and E and minerals like zinc, selenium and molybdenum, the use of opium, HPV infection and various genetic factors have been found associated with the occurrence of the disease worldwide. Wide geographic differences and substantial changes in the incidence of esophageal cancer occurring over time have been suggested. Among the risk factors in India, betel quid chewing carries a relatively high risk. High incidences in Kashmir have been associated with the consumption of hot salted tea, sun-dried, smoked foods, tobacco in the form of hukka and various genetic factors. The exact cause of esophageal squamous cell carcinoma is unknown. Much work has been carried out on the role of various environmental factors, gene mutations, and polymorphisms worldwide, including Kashmir. Although the Kashmir valley is present on the border of the 'high risk esophageal cancer belt' and esophageal squamous cell carcinoma represents the most commonly occurring malignancy in Kashmir, the amount of information available on various associated factors is still very little as there is a paucity of various epidemiological and molecular studies being carried out in this field.

Key words: esophageal cancer, Kashmir, risk factors.