

## **Pattern of upper gastro intestinal cancer and its associated factors among upper gastrointestinal cancer patients admitted to Teaching Hospital Jaffna and Trail Cancer Hospital Thellipalai**

Thuvaragan A<sup>1</sup>, Mathumai K<sup>1</sup>, Sarma ST<sup>2</sup>, Surenthirakumaran R<sup>3</sup>, Kavitha I<sup>4</sup>

<sup>1</sup> Faculty of Medicine, University of Jaffna

<sup>2</sup> Department of Surgery, Faculty of Medicine, University of Jaffna

<sup>3</sup> Department of Community and Family Medicine, Faculty of Medicine, University of Jaffna

<sup>4</sup> Trail Cancer Hospital Thellipalai, Jaffna

**Background:** Prevalence of upper gastrointestinal (GI) cancers has shown an increasing pattern during the last decade. Based on data from the Statistical Unit of the Jaffna Teaching Hospital, upper GI malignancies account for a fifth of total cancer admissions. Their insidious nature of onset combined with delayed consultation driven by ignorance of symptoms, make upper GI malignancies, especially that of stomach and oesophagus, some of the most lethal cancers. The combined inadequacy of cancer prevention methods, public education, and access to cancer treatment results in a high mortality rate.

**Methods:** A cross sectional institutional based descriptive study was conducted among 225 patients diagnosed with an upper GI malignancy from oncology clinics, the oncology ward and surgical wards of Teaching Hospital Jaffna and Trail Cancer Hospital Thellipalai. An interviewer-administered questionnaire was used to collect data. Chi Squared test was used to assess the relationship between pattern of upper GI cancer and its associated risk factors.

**Results:** Among 104 participants, the majority were within the age range of 40 to 80 years (94%), especially in the sixth decade of life, with a male predominance (58%). Most had completed their primary education (41%). Sixty percent worked and of them around 90% were manual workers; farmers accounted for a significant proportion (38%) followed by labourers (16%). Almost three quarters of the study population were from Jaffna.

Oesophageal cancer was the most common cancer (70%), predominantly the squamous cell variant (94.5%), followed by cancers of the stomach and pancreas. The pattern of upper GI cancer was based on oesophageal and non-oesophageal type. Age above 54 years, consumption of alcohol and consumption of alcohol more than 14 units per week, chewing of betel quid were significantly associated with the development of upper GI cancer. Male sex, manual work, especially farming and manual labour, and gastro-oesophageal reflux diseases (GORD) were positively associated with oesophageal cancer, although the relationship was not statistically significant.

**Conclusion:** Further investigation may elucidate the need for public awareness programmes and screening facilities. Such timely intervention for people with the above risk factors would lead to early diagnosis and better prognosis of upper GI cancers.

**Key words:** Upper gastrointestinal cancer, risk factors, Jaffna