

Lung metastases in patients with head and neck cancers in northern Sri Lanka: A retrospective analysis

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Background and Objective: Head and neck cancer (HNC) is the commonest cancer in Sri Lanka. Prognosis is greatly influenced by the stage at diagnosis. CT scanning is a sensitive imaging modality to diagnose pulmonary metastasis—the commonest site of distant metastases—and is routinely performed at diagnosis in patients with HNC. The objective of this study was to determine the proportion of patients with lung metastases on staging CT and its association with patient- and tumour-related prognostic factors in patients with HNC referred to Tellipalai Trail Cancer Hospital during an 8-year period (01/01/2013 to 31/12/2020).

Methods: This institutional-based analytical cross-sectional study was carried out from September to December 2021. Data were extracted from records of all patients with HNC, with a staging CT of the chest, referred to Tellipalai Trail Cancer Hospital during the 8-year period. Frequencies, percentages, and Fisher’s exact test was used in the analysis with SPSS-26. The critical level was set at 0.05.

Results: Data were extracted from the records of 211 patients with HNC. Among them, 125 (59.2%) were ≥ 60 years and 144 (68.2%) were male. The most common site of HNC was the oral cavity (n=86, 40.8%), followed by the pharynx (n=75, 35.5%), larynx (n=45, 21.3%), and salivary glands (n=5, 2.4%). Only 9 (4.3%) patients had lung metastases at presentation; among them, 5 had the primary tumour in the pharynx, 2 in the larynx, and 1 each in the oral cavity and salivary glands. Among them, the commonest histological type and grade were squamous cell carcinoma (n=8) and grade 2 (n=3); lung metastases showed more or less equal distribution across stages. Most patients with metastases were males (n=7), alcohol consumers (n=7), and smokers (n=6). However, there was no association between the presence of lung metastasis and patient- and tumor-related prognostic factors.

Conclusions: Lung metastasis at diagnosis among patients with HNC (4.3%) is much lower in our study setting compared to studies from other parts of the world, including New York (37%), Taiwan (20%), and Holland (11.8%). Further research is needed to explore the utility of routine CT chest for patients with HNC in Sri Lanka.

Keywords: Head and neck cancer, Pulmonary metastasis, Staging, Computerized tomography