FAILURE PATTERNS OF HEAD AND NECK CANCER PATIENTS TREATED WITH CHEMOTHERAPY AND RADIOTHERAPY

Ahmed Gaber Gewil, Nadia Abd El-Latif El-Deeb, Maher Mohamed Saber Soliman, Menna Tarek Mohamed Zewil

Department of Clinical Oncology and Nuclear Medicine, Faculty of Medicine, Alexandria University

Introduction

Head and neck cancer is a terminology used for a group of cancers originating in the lips, oral cavity, oropharynx, salivary glands, larynx, pharynx, hypopharynx, nasopharynx, and sinuses. These cancers represent a significant global health burden, accounting for substantial morbidity and mortality. These malignancies, often linked to complex etiologies, pose diagnostic and therapeutic challenges, with recurrence rates and survival outcomes varying widely. Understanding recurrence patterns and their impact is crucial for optimizing management strategies. So, we aimed of determine the pattern of failure for non-metastatic head and neck squamous cell carcinomas (SCC), the prognostic and predictive factors for recurrence of head and neck squamous cell carcinoma (HNSCC), local failure free survival (LFFS), distant failure free survival (DFFS), disease-free survival (DFS) and overall survival.

Aim of the work

The aim of this study was to identify the failure pattern associated with non-metastatic squamous cell carcinomas (SCC) of the head and neck.
To identify risk factors for recurrence of head and neck SCC and methods for preventing it.

Patients and Methods

Our study included 1500 patients, both sexes, with histologically proven SCC of the head and neck. All patients were subjected to chemotherapy and radiotherapy treatment. Patients had follow-up (FU) for five years with scheduled visits. First FU attendance was within two months after end of primary therapy. The second planned attendance was scheduled five months after ended primary treatment.

Results

Regarding pattern of failure, 878 patients had no local failure. For the patients with a type of failure, most patients developed local recurrence which occurred in 544 patients, local failure with cervical LN occurred in 131 patients. For the patients with a type of failure, most patients developed lung metastasis which occurred in 145 patients, bone metastasis occurred in 44 patients, liver metastasis in 38 patients. LFFS with a mean of 20.9±9.12. DFFS with a mean of 20.9±9.14. DFS with a mean of 20.9±9.17. There were 1048 patients lost follow up, 309 patients on follow up, 196 patients died.

Table (1): Case distribution based on survival rate

Time of relapse		(n=1553)
LFFS (Months)	Mean ± SD	23.4 ± 3.08
	Range	1 - 48
DFFS (Months)	Mean ± SD	23.8 ± 2.71
	Range	1 - 72
DFS (Months)	Mean ± SD	23.4 ± 3.82
	Range	1 - 72

LFS: Survival without failure in a limited area. Distant failure-free survival (DFFS) is a concept. The term disease-free survival (DFS) is useful in this context.

Table (2) :Case distribution based on overall survival rate

Overall survival	No.	%
Lost follow up	1048	67.48
On follow up	309	19.90
Died	196	12.62
Total	1553	100

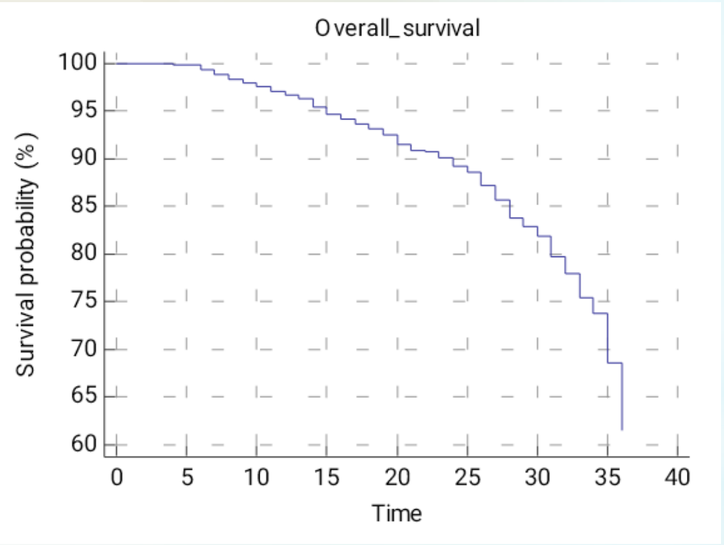

Figure (1) : Overall survival rate as shown by the Kaplan-Meier curve

Conclusion

Evaluation of distant metastasis (DM) is part of every new cancer evaluation. Understanding DM presentation patterns may impact the imaging workup of HNSCC. The mortality rate was 12.62%.