



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



HANAA ALY



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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HANAA ALY



Factors Influencing Treatment Outcome of Non-Nasopharyngeal Head and Neck Squamous Cell Carcinoma in Geriatric Patients

Thesis

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By

Rowaa Mohamed Nagi Mahmoud

M.B.B.Ch.

Under supervision of

Prof. Dr. Atef Youssef Riad

*Professor of Clinical Oncology and Nuclear Medicine
Faculty of Medicine -Ain Shams University*

Prof. Dr. Dina Ragab Diab

*Professor of Clinical Oncology and Nuclear Medicine
Faculty of Medicine -Ain Shams University*

Dr. Khaled Abd-Aziz Mohamed

*Lecturer of Clinical Oncology and Nuclear Medicine
Faculty of Medicine -Ain Shams University*

Faculty of Medicine
Ain Shams University

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالَ

سَبِّحْكَ لَا إِلَهَ إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ
الْعَلِيمُ الْعَظِيمُ

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List of Abbreviations

Abb.	Full term
5FU	Fluorouracil
ADL	Activities of Daily Living
AJCC	American Joint Committee on Cancer
BSA.....	Body surface area
CGA	Comprehensive geriatric assessment
CT	Computed tomography
CTCAE	Common Terminology Criteria for Adverse Events
DFS.....	Disease free survival
DM.....	Diabetes mellitus
EBV	Epstein Barr virus
ECG.....	Electrocardiogram
ECOG	Eastern Cooperative Oncology Group
EUA	Examination under anesthesia
GLOBOCAN.....	Global Cancer Statistics
Hb	Hemoglobin
HNC	Head and neck cancers
HNSCC	Head and neck squamous cell carcinoma
HPV	Human papilloma virus
HR.....	Hazard ratio
IADL.....	Instrumental Activities of Daily Living
INHANCE	International Head and Neck Cancer Epidemiology
MARCH	Meta-Analysis of Radiotherapy in squamous cell Carcinomas of Head and neck
MDT	Multidisciplinary team
MRI.....	Magnetic resonance imaging
NCCN	National Comprehensive Cancer Network
OM	Oral mucositis

List of Abbreviations Cont...

Abb.	Full term
OS	Overall survival
PS	Performance status
QOL	Quality of life
QUANTEC	Quantitative Analyses of Normal Tissue Effects in the clinic
RAD	Radiation associated dysphagia
RECIST	Response Evaluation Criteria in Solid Tumors
RS	Relative survival
RTOG	Radiation Therapy Oncology Group
SPC	Second primary cancer
TNM	Tumor, node, metastases
TOLM	Transoral laser microsurgery
TORS	Transoral robotic surgery
TPF	Docetaxel–cisplatin–5FU
WHO	World Health Organization

INTRODUCTION

Head and neck cancers (HNC) are heterogeneous group of malignancy and represent the sixth most common malignancy worldwide ¹. They include malignant neoplasms arising from oral cavity, nasopharynx, larynx, hypopharynx, oropharynx, nasal cavity, paranasal sinuses and salivary glands ². Nasopharyngeal carcinoma differs from other HNC in its epidemiology, risk factors, clinical behavior and treatment ³. About 90-95% of HNC are squamous cell carcinoma (HNSCC) ⁴.

This study discusses factors affecting treatment outcome of non-nasopharyngeal HNSCC (larynx, oropharynx and hypopharynx) in geriatric patients.

Cancer may be considered an age-related disease. More than 50% of cancer patients are aged 65 years or older ⁵. HNC incidence increases with age ⁶. At time of diagnosis, twenty-five percent of HNC patients are above 70 years ⁷. This incidence is assumed to reach 60% in Western countries at 2030 ⁸.

There's no single definition for old age and mostly based on the life span of individuals. This definition varies from developed and developing countries. In most of developed countries the age of retirement is 65 years so, the definition of age related to that. While in developing counties it's more complex and it's between 55 to 60 years ⁹. Most of individuals don't have an official record of their actual birth date and their

life expectancy less than those in developed countries. Proper assessment of physical activity and functional status should be considered ¹⁰.

The World Health Organization (WHO) defined geriatric populations as those aged over 60-65 years ¹¹. They can be classified into three categories: 1) young old patients are 65 to 75 years of age; 2) old old patients are 76 to 85 years of age; and 3) oldest old patients are older than 85 years of age.¹²

Geriatric population is a growing group in the world, in 2019 there were 703 million individuals aged 65 years or more and this number is expected to reach 1.5 billion in 2050 so, there will be a large pool of geriatric patients with HNC that needs appropriate treatment. ¹³ Since the aging process is associated with multiple physiological changes and deterioration of organs' function, appropriate treatment doesn't come without challenges¹⁴.

Despite that, geriatric cancer patients are under-represented in clinical trial ¹⁵, and may not receive the standard treatment compared to young patients. This is due to multiple factors which include associated co-morbidities, poor performance status, increased toxicity, lack of care giving, and clinician or patients preference ¹⁶.

Chronological age alone isn't sufficient to assess and predict the patient's tolerance to treatment, as there is a wide

difference between the patients of the same age and there are multiple factors that can influence treatment outcome of geriatric cancer patients. The main objective during the management of geriatric patients is to assess risk to benefit ratio. According to National Comprehensive Cancer Network (NCCN) guidelines there are unique issues to be considered when dealing with geriatric cancer patients:

- The natural history of some cancers and treatment response may be changed with age. ¹²
- Co-morbidities and physiological changes with age may affect the tolerance of cancer treatment ¹⁷.
- The quality of life and social support should be considered in decision making.
- Chronological age alone isn't a contraindication in cancer treatment. ¹⁸