



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ





شبكة المعلومات الجامعية



شبكة المعلومات الجامعية

التوثيق الالكتروني والميكرو فيلم

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم



نقسم بـلله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون أية تغيرات



يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %



شبكة المعلومات الجامعية



بعض الوثائق الأصلية تالفة



شبكة المعلومات الجامعية



بالرسالة صفحات

لم ترد بالأصل

THE PATTERN OF EXTRACAPSULAR NODAL SPREAD IN CERVICAL METASTASIS

Thesis

Submitted for partial fulfilment

of the requirement for the M.D.Degree

IN

Otorhinolaryngology

Presented By

Osama Abd El Kareem Mohamed

M.B.,B.ch

M.sc in Otorhinolaryngology

supervisors

Prof. Dr.

Mamdouh El- Gohary

Professor of Otorhinolaryngology

Ain Shams University

Prof. Dr.

Adly Farid Ghaly

Professor of Pathology

Ain Shams Universty

Prof.Dr.

Magdi Amin Riad

Assistant Professor of Otorhinolaryngology

Ain Shams University

Prof. Dr.

Magda Morad El sayed

Assistant Professor of Pathology

Cancer Institute. Cairo University

Faculty Of Medicine

Ain Shams University

1994



قَالُوا سُبْحَانَكَ

لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ الْحَكِيمُ الْحَكِيمُ

مدن الله العظيم

سورة البقرة آية ٢٢

This Work is Dedicated to My Family.

ACKNOWLEDGEMENT

I am deeply thankful to GOD by the grace of whom this work was possible.

I would like to express my gratitude to Dr. Mamdouh El-Gohary, Professor of Otorhinolaryngology, Ain Shams University, for Continuous supervision, valuable help and constant guidance and advise.

I am deeply indebted to Dr. Adly Farid Ghaly, Professor of Pathology, Ain Shams University, for his continuous, sincere and generous guidance during this work.

I am especially grateful to Dr. Magdi Amin Riad, Assistant Professor of Otorhinolaryngology for his kind supervision and his patience in revising this work.

I would like to express appreciation to Dr. Magda Morad El Sayed Assistant Professor of Pathology, in Cancer Institute. Cairo University, for miticulous effort and unlimited help during the conduction of this work.

I would like to thancks the staff of Cancer Institute for their cooperation and for allowing me to use their cases in parts of this thesis.

And to all who contributed in this work, I tender my most appreciative and grateful thanks.

Osama Abd El Kareem

CONTENTS

INTRODUCTION	1
Anatomy of the lymphatic of the head and neck	4
Special aspects of lymphatic metastases	11
Diagnosis of metastatic neck nodes	12
Staging of metastatic neck nodes	18
Prognostic factors associated with cervical metastases.	20
Extracapsular spread in cervical lymph node metastases.	24
Management of cervical lymph node metastases.	31
* Radical neck dissection	33
* Functional neck dissection.	35
* Modified neck dissection.	38
* Limited neck dissection	40
- Supraomohyoid neck dissection	41
- Anterior neck dissection.	42
- Paratracheal neck dissection	43
* Radiotherapy.	44
* Combined therapy	45
- Pre-operative radiation	47
- Post-operative radiation	48
Treatment of clinically negative neck	49
Patients and methods	52
RESULTS	58
DISCUSSION	112
CONCLUSION	136
SUMMARY	138
REFERENCES	140
ARABIC SUMMARY	----

● *Introduction and Aim of The work* ●

Introduction & Aim of The Work

Shahwan Computer Center

Introduction and Aim of the Work

Although a nodal mass of abnormal proportions that appears in the neck may represent a lymphoma, adenocarcinoma or various metastases from remote sites, most such adenopathies in an adult population represent metastatic squamous carcinoma. Such masses are usually metastases from a primary tumour in the regional aerodigestive tract. In most cases the primary site is obvious and thus the otolaryngologist-head and neck surgeon is able to formulate a treatment plan that considers both the primary tumour with its extension (s) and metastases and the interrelationship involved. Saying that the neck is critical to survival in patients with aerodigestive squamous cell carcinoma (ADSC) is an understatement (**Schuller, et al., 1980, Spiro, et al., 1974**), although such factors as nodal multiplicity, bilaterality, and/or contralaterality are ominous, the affected neck is the most critical factor in this disease.

The radical or complete neck dissection described by **Crile (1906)** remained for years the surgical treatment of choice for carcinoma metastases to cervical lymph nodes from head and neck primary squamous cell carcinoma. The operation is designed on the Halsted concept of proper cancer treatment, which is based on the premise that successful cancer therapy requires complete

removal of the primary cancer, the intervening lymphatics, and the lymph nodes that serve the primary site.

The reported rate of recurrence of tumour in the neck following radical neck dissection ranges from 10 to 45 percent (Lingman, et al., 1977, Jesse, et al., 1978, McGuirt, et al., 1979). These rates are particularly alarming, because the survival rates drop to almost one fifth with the postoperative recurrence.

Extracapsular nodal spread is the most significant cause for tumour recurrence (Molinari, et al., 1980), and since a classical neck dissection operation removes between 70 and 90 neck nodes, the importance of identifying extracapsular spread in one of these nodes cannot be over-stressed, as in such a case post-operative radiotherapy is essential to effect tumour control.

Hitherto, identification of extracapsular spread is based on estimation of nodal size or fixation, the consensus remains that if the nodal diameter exceeds 3cm, extracapsular spread is assumed to have occurred (Snow, et al., 1982).

Obviously, it is likely that extracapsular spread could happen with smaller nodes and consequently remains unrecognised.

The aim of this work is to :

- (1) determine the prevalence of extracapsular nodal spread in the entire neck field .
- (2) Correlate extracapsular spread to some particularities of the primary tumour and its neck secondaries (differentiation, site, size.....).

Review of Literature

Review of Literature

Shahwan Computer Center