

**Histopathological Features of  
Laryngeal Carcinoma  
A Retrospective Statistical Study**

**Thesis**

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By

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## **ABSTRACT**

Laryngeal carcinoma is the most common cancer affecting the head and neck region. It is most predominant in men in the fifth and sixth decades of life. Squamous cell carcinoma constitutes the majority of laryngeal malignancies.

This study aimed at production of an accurate registry of laryngeal carcinoma cases received by the pathology department in El Kasr El Aini Hospital during the period from January 2004 till December 2008, with re evaluation of all the slides histologically. 297 cases were collected. The patient's age ranged from 23 to 90 years with male predominance (95.6%). 126 cases (42.4%) were transglottic, 91 cases (30.6%) were supraglottic, 73 cases (24.6%) were glottic, and 7 cases (2.4%) were subglottic. The predominant histopathologic type was squamous cell carcinoma (99.7%).

This work may be put as a nucleus and linked with other registries of laryngeal carcinoma in different governorates in Egypt.

***Key words:*** Laryngeal Carcinoma

# *CONTENTS*

INTRODUCTION .....	1
AIM OF WORK .....	3
REVIEW OF LITERATURE.....	4
MATERIALS AND METHODS .....	61
RESULTS .....	64
DISCUSSION .....	90
SUMMARY .....	99
CONCLUSION AND RECOMMENDATIONS .....	101
REFERENCES .....	102
ARABIC SUMMARY	

## **LIST OF ABBREVIATIONS**

**AJCC:** American joint committee of cancer.

**ACC:** Adenoid cystic carcinoma.

**ASC:** Adenosquamous carcinoma.

**BSCC:** Basaloid squamous cell carcinoma.

**CIS:** Carcinoma in situ.

**COX 2:** Cyclooxygenase 2.

**CT:** Computed tomography.

**ECS:** Extra capsular spread.

**EGFR:** Epidermal growth factor receptor.

**FGR:** Fibroblast growth factor.

**FNAC:** Fine needle aspiration cytology.

**GERD:** Gastro esophageal reflux disease.

**HNSCCs:** Head neck squamous cell carcinomas.

**HPF:** High power field.

**HPVs:** Human papilloma viruses.

**LOH:** Loss of heterozygosity.

**MEC:** Mucoepidermoid carcinoma.

**MECC:** Middle East Cancer Consortium.

**MMP:** Matrix metalloproteinase.

**MRI:** Magnetic resonance imaging.

**MW:** Molecular weight.

**NCND:** Non smoker Non drinker.

**NCI:** National Cancer Institute.

**PDGF:** Platelet derived growth factor.

**PEH:** Pseudo epitheliomatous hyperplasia.

**PSCC:** Papillary squamous cell carcinoma.

**SCC:** Squamous cell carcinoma.

**SEER:** Surveillance, Epidemiology, and End Results program.

**SILs:** Squamous intraepithelial lesions.

**SIN:** Squamous intraepithelial neoplasia.

**SpCCs:** Spindle cell carcinomas.

**TGF:** Transforming growth factor.

**UADT:** Upper aerodigestive tract.

**US:** Ultrasound.

**VC:** Verrucous carcinoma.

**VEGF:** Vascular endothelial growth factor.

**VV:** Verruca vulgaris.

**WHO:** World Health Organization.

## **LIST OF TABLES**

**Table (1):** Classification schemes that histologically categorize precursor and related lesions.

**Table (2):** Criteria used for diagnosing dysplasia.

**Table (3):** WHO histological classification of tumors of the larynx (2003).

**Table (4):** Invasive SCC Grading System.

**Table (5):** TNM staging of laryngeal carcinoma (2002).

**Table (6):** AJCC Stage Groupings.

**Table (7):** Distribution of laryngeal carcinoma cases per year in Kasr El Aini Hospital.

**Table ( 8):** Sex distribution in laryngeal carcinoma.

**Table (9):** Age distribution in studied patients with laryngeal carcinoma.

**Table (10):** Number and percentages of direct laryngoscopic biopsies, partial laryngectomies, total laryngectomies, and total laryngectomies with neck dissection.

**Table (11):** Distribution of clinical presenting symptoms in laryngeal carcinoma cases.

**Table ( 12):** Site distribution in cases of laryngeal carcinoma.

**Table (13):** Histopathologic types of laryngeal carcinoma cases.

**Table (14):** Histologic variants of SCC.

**Table (15):** Modified Broders grade of laryngeal SCCs.

**Table (16):** Thyroid cartilage invasion in cases diagnosed by laryngectomy.

**Table (17):** Extralaryngeal spread in cases diagnosed by laryngectomy.

**Table (18):** Correlation between thyroid cartilage invasion and site of laryngeal carcinomas in cases diagnosed by laryngectomy.

**Table (19):** Correlation between extralaryngeal spread and site of laryngeal carcinomas in cases diagnosed by laryngectomy.

**Table (20):** Lymph node metastasis in cases diagnosed by total laryngectomies with neck dissection.

**Table (21):** TNM stage grouping of laryngeal carcinoma cases diagnosed by total laryngectomies with neck dissection.



**Table (22):** Correlation between the stage and site of laryngeal carcinoma cases diagnosed by total laryngectomies with neck dissection.

**Table (23):** Correlation between the histologic grade and stage of laryngeal SCCs diagnosed by total laryngectomies with neck dissection.

**Table (24):** Correlation between lymph node metastasis and site of laryngeal carcinoma cases diagnosed by total laryngectomies with neck dissection.

**Table (25):** Correlation between the histologic grade and lymph node metastasis in laryngeal SCCs diagnosed by total laryngectomies with neck dissection.

**Table (26):** Correlation between the extralaryngeal spread and histologic grade of laryngeal SCCs diagnosed by laryngectomy.

**Table (27):** Correlation between the thyroid cartilage invasion and histologic grade of laryngeal SCCs diagnosed by laryngectomy .

## **LIST OF GRAPHS**

**Graph (1):** Distribution of laryngeal carcinoma cases per year in Kasr El Aini Hospital.

**Graph (2):** Age distribution in studied patients with laryngeal carcinoma.

**Graph (3):** Type of specimens included in the study.

**Graph (4):** Site distribution in cases of laryngeal carcinoma.

**Graph (5):** Histologic variants of SCC.

**Graph (6):** TNM stage grouping of laryngeal carcinoma cases diagnosed by total laryngectomies with neck dissection.

**Graph (7):** Correlation between the histologic grade and lymph node metastasis in laryngeal SCCs diagnosed by total laryngectomies with neck dissection.

## **LIST OF CHARTS**

**Chart (1):** Sex distribution in laryngeal carcinoma.

**Chart (2):** Distribution of clinical presenting symptoms in laryngeal carcinoma cases.

**Chart (3):** Modified Broders grade of laryngeal SCCs.

**Chart (4):** Extralaryngeal spread in cases diagnosed by laryngectomy.

**Chart (5):** Lymph node metastasis in cases diagnosed by total laryngectomies with neck dissection.

## **LIST OF FIGURES**

**Fig (1):** Posterior view of the larynx.

**Fig (2):** Compartments of the larynx.

**Fig (3):** Well differentiated SCC formed of nests of malignant squamous epithelial cells showing mild nuclear pleomorphism and central keratinization. (H and E x 100)

**Fig (4):** Moderately differentiated SCC showing multiple nests of malignant squamous epithelial cells exhibiting moderate nuclear pleomorphism and focal keratinization. (H and E x 40)

**Fig (5):** Moderately differentiated SCC composed of anastomosing sheets of malignant squamous epithelial cells showing moderate nuclear pleomorphism with surrounding desmoplastic reaction. (H and E x 100)

**Fig (6):** Moderately differentiated SCC showing island of malignant squamous epithelial cells exhibiting moderate nuclear pleomorphism. (H and E x 200)

**Fig (7):** Poorly differentiated SCC composed mainly of solid sheets of malignant squamous epithelial cells showing marked nuclear pleomorphism and multiple mitotic figures. (H and E x 200)

**Fig (8):** Moderately differentiated SCC invading the thyroid cartilage. (H and E x 40)

**Fig (9):** Poorly differentiated SCC invading the thyroid gland.

(H and E x 100)

**Fig (10):** Spindle cell carcinoma showing pure spindle component. (H and E x 100)

**Fig (11):** Spindle cell carcinoma showing metaplastic cartilage formation. (H and E x 100)

**Fig (12):** Papillary SCC showing multiple papillae having fibrovascular cores with stromal invasion. (H and E x 40)

**Fig (13):** Basaloid SCC composed of nests of basaloid cells with hyperchromatic nuclei and scanty cytoplasm showing peripheral palisading. (H and E x 100)

**Fig (14):** Verrucous carcinoma showing invaginations lined by thick well differentiated squamous epithelium with marked surface keratinization. (H and E x 100)

**Fig (15):** Verrucous carcinoma showing well defined broad pushing margins. (H and E x 100)

**Fig (16):** Mucoepidermoid carcinoma composed of sheets of epidermoid cells with multiple cysts. (H and E x 100)

**Fig (17):** Lymph node showing metastatic deposit of SCC. (H and E x 100)

# ***INTRODUCTION***

## **INTRODUCTION**

Laryngeal carcinoma is the most common cancer affecting the head and neck region (*Jones et al., 2004*). The incidence of laryngeal cancer ranges from 2.5 to 17.2 per 100,000 per year and it represents approximately 3% of new malignancy diagnosed annually worldwide (*Connor, 2007*).

In Egypt, laryngeal cancer occupied the first rank among all the respiratory cancers (27.84%) and the tenth rank among all the total cancers (1.77%), in cancer registry performed by NCI 2003-2004 (*Mokhtar et al., 2007*).

Incidences throughout different regions of the world vary considerably. Southern and eastern Europe, South America, and western Asia have the highest incidence (*Parkin et al., 2005*). Japan, Norway and Sweden have the lowest incidence (*Mastronikolis et al., 2008*).

Larynx cancer is predominantly a cancer of men, in whom it comprises 2.4% of cases and 2.1% of deaths. (*Parkin et al., 2005*). The peak incidence is in those aged 50-60 years (*Iqbal et al., 2007*).

Smoking, particularly of cigarettes and alcohol consumption are the major risk factors for laryngeal cancer (*Coupland et al., 2009*).

There are four major types of laryngeal carcinoma: glottic, supraglottic, subglottic, and transglottic carcinomas (*Rosai, 2004*).