

# STATISTICAL STUDY REGARDING LARYNGEAL CANCER AT THE E.N.T. COLȚEA CLINIC

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**Keywords:** laryngeal cancer, alcohol, smoking, surgical treatment

**Abstract:** Between 2007 and 2010, at the ENT Colțea Clinic, laryngeal cancer pathology represented 3,22% of the admitted cases and about 23,6% of the neoplasms cases hospitalized within this period. Alcohol consumption and smoking held an important place amongst the predisposing etiologic factors. Our study reveals the particularities of this pathology, reflected in the medical-surgical practice at the ENT Colțea Clinic.

**Cuvinte cheie:** cancer laringian, alcool, tutun, tratament chirurgical

**Rezumat:** Între anii 2007-2010, în Clinica O.R.L. Colțea, patologia oncologică laringiană a reprezentat 3,22 % dintre cazurile internate și cca 23,6% din cazurile de neoplasme internate în această perioadă. Consumul de alcool și fumatul au ocupat un loc important în rândul factorilor etiologici favorizanți. Studiul nostru relevă particularitățile acestei patologii, reflectate în practica medico-chirurgicală de la nivelul Clinicii O.R.L. Colțea.

## INTRODUCTION

Laryngeal cancer continues to fill in an important place amidst the ENT oncology, representing 26% of the head and throat cancers.(1) The alcohol-tobacco poisoning is acknowledged to be an important risk factor, this being adjoined with the gastroesophageal reflux, exposure to occupational hazards, as well as the papilloma virus infection (HPV) related to sexual behaviour.(2) The current treatment principles consist of preserving the phonatory and respiratory function, like the organ itself, therapeutic strategies involving surgery, radio and chemotherapy.

## PURPOSE

Our study reveals the particularities of laryngeal cancer reflected in the medical-surgical practice at the ENT Colțea Clinic.

## METHODS

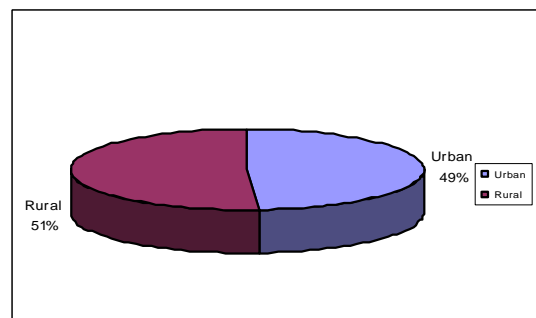
Along this study, 674 patients have been included, having been evaluated the clinical and therapeutic aspects of the laryngeal neoplasms surgically treated at the ENT Colțea Clinic, between January 2007 – December 2012, from a total of 20892 patients treated here during this period of time. The cases were assessed according to the following variables: age, gender, area of origin (urban/rural), risk factors (alcohol, tobacco) and surgical treatment applied.

## RESULTS AND DISCUSSIONS

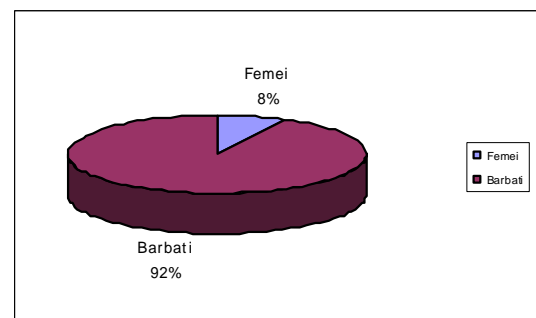
In this transversal descriptive study with retrospective approach (3), the patients originated almost in equal ratio both from the urban area (51%), and from the rural one (49%) (figure no. 1), the share of men affected by this disease being greater (92%) as against women (8%), compared to the European statistics where the share of men reaches 87% (figure no. 2).

Regarding age, the most affected age group is comprised between 50-70 years old (figure no. 3), according to the data taken from literature.

**Figure no. 1. Area of origin for laryngeal cancer cases (general)**



**Figure no. 2. Sex ratio between 2007 and 2010**



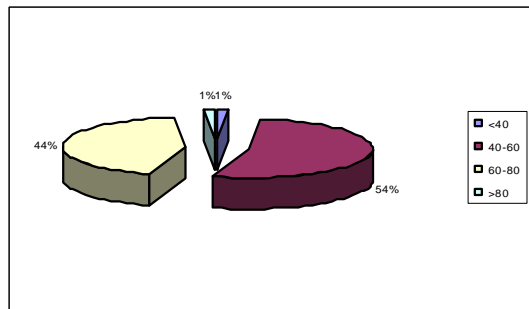
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## CLINICAL ASPECTS

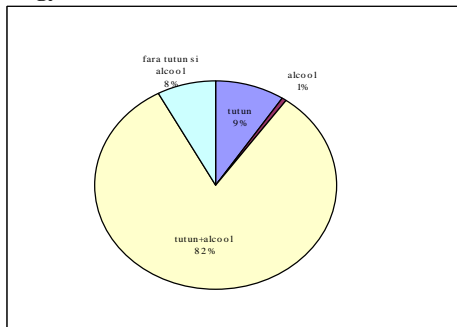
**Figure no. 3. Distribution by age groups between 2007 and 2010**



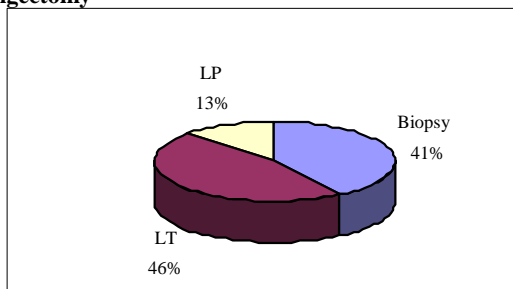
The more frequently risk factor involved in the occurrence of laryngeal cancer is the alcohol-tobacco poisoning at a rate of 82% (374 cases) (figure no.4). Due to the difficult and often incomplete anamnesis, the data regarding the exercise of the profession in a toxic environment were insufficient.

The surgical treatment applied to the patients admitted at the ENT Colțea Clinic within 2007 and 2010 was in most the cases total laryngectomy (46%), compared to the current tendencies registered in Europe, where the account of partial laryngectomy prevails (70-80%), (according to our data, only 13%), outcome given by the late seeking of specialized medical care, when advanced stages (stage III-IV) are already reached. It is also distinguishable the high number of biopsies (41%), that have not been followed by surgical treatment performed at the ENT Colțea Clinic, patients refusing to undergo invasive treatment; part of them undergoing oncological treatments of radio and chemotherapy. Biopsied cases have also been taken into account, with a histopathology exam confirmed by neoplasm, without being followed by a surgical treatment (figures no. 5 and 6).

**Figure no. 4. Combinations of risk factors in larynx cancer epidemiology**



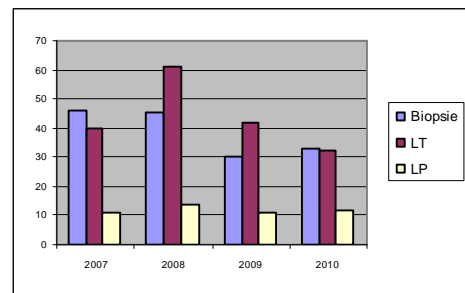
**Figure no. 5. The applied treatment – percentage distribution (LT=total laryngectomy /LP=partial laryngectomy)**



The rare epidemiological reproduction, the difficulty incurred with methods, as well as the complexity of laryngeal

cancer call in future for a more detailed inquiry regarding these plurifactorial interactions.

**Figure no. 6. Applied treatment – year distribution**



The limits of this study are related to its sources:

- difficulty in accessing hospital archives beyond 2006;
- one single database belonging to one clinic, but indicative in what concerns the ENT oncological pathology in Romania.

The study took into account only the patients admitted based on a general clinical observation sheet, ruling out therefore the patients bearing endolaryngeal tumour formations, biopsied ambulatory, with daytime or one-day observation sheet.

Error sources of the study:

- low compliance of patients (concerning the follow-up),
- incomplete or wrongly filled out observation sheets,
- wrongfully archiving of the observation sheets,
- lost cases due to mistaken diagnosis codes (many neoplasms = C32.1 were wrongly coded as tumours with unpredictable evolution = D37.0) and afferent surgical procedures (G00602 = excision of other lesions of the larynx instead of G00802 = medial laryngectomy with vocal cordectomy).(4)

## CONCLUSIONS

The epidemiological data regarding the cancer of the larynx mostly overlaps the ones reported worldwide, except for the therapeutic attitude, strongly connected to the late presentation for medical services, when the principle of preserving the functions of the larynx and of the organ can no longer be upheld. It is disclosed, therefore, the urge for a better informing of the patients in order to improve life quality.

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