

Aetiology of Hoarseness in Patients above 40 Years of Age

(Across Sectional Study)

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الخلاصة

اجريت هذه الدراسة لتحديد أهم الأسباب المؤدية إلى بحة الصوت في المرضى الذين تزيد أعمارهم عن 40 سنة وكذلك العلاقة بين الفترة الزمنية لبحة الصوت وأسبابها . هذه الدراسة هي دراسة مقطعية في طبيعتها . تضمنت تقييم 80 مريض يعانون من بحة الصوت بين شهر نيسان عام 2011 وشهر كانون الاول 2011 في شعبة الاذن الانف الحنجرة في مستشفى الديوانية التعليمي. كان هناك 57 حالة من اصل 80 مريض يعانون من بحة الصوت قد حدثت لأسباب غير ورمية وهذه الأسباب (التهاب الحنجرة الوبائي 28,75% التهاب الحنجرة الحامضي 21,75% , التهاب الحنجرة التحسسي 16,25% , شلل الحبل الصوتي 2,5% اسباب نفسية 2,5% أسباب صدمية 0% وذمة رنكيز 0%) . بينما حدثت بحة الصوت في المرضى المتبقين 23 لأسباب ورمية , وهذه الأسباب هي (سرطان الحنجرة 7,5% , بوليبيد الحنجرة 7,5% عقدة الحنجرة 3,75% كيس الحنجرة 1,25% ورم حبيبي 1,25% ورم حميد 0%) . وكذلك لاحظنا ان نسبة الاسباب الورمية تزداد في المرضى الذين يعانون من بحة الصوت لفترة اطول من شهر واحد . نستنتج ان نسبة حدوث بحة الصوت لاسباب غير ورمية في المرضى الذين أعمارهم تزيد عن 40 سنة أكثر من نسبة حدوثها لأسباب ورمية . علاوة على ذلك . هناك علاقة طردية بين طول الفترة الزمنية لبحة الصوت والأسباب الورمية .

Abstract

Objectives: this study is designed to determine the most common causes of hoarseness in patients above 40 years of age and the relationship between hoarseness causes and its duration.

Patient and Methods: the study is cross sectional study.

It considers 80 patients with hoarseness who were assessed between april 2011 and December 2011 at E.N.T. outpatient clinic ;department of otolaryngology in AL Diwaniya Teaching hospital. In AL Diwaniya city . Iraq.

Results :out of the 80 patients ,57 had hoarseness because of non neoplastic causes giving an incidence of 71,25% (infective laryngitis n= 23,28.75% ,acid laryngitis n =17,21.25% , allergic laryngitis n =13,16.25,% , vocal cord palsy n =2, 2.5,% , psychogenic n =2,2.5% ,) while hoarseness occurred in the remaining 23 patients as a result of neoplastic causes, giving an incidence of 28 , 75% (laryngeal carcinoma n = 12 , 15 % vocal cord polyp n =6 , 7.5 % ,vocal c. nodule n = 3, 3.75% ,laryngeal cyst n =1 ,1. 25%

granuloma n = 1,1.25% , benign tumor n = 0,0 %) we also found that hoarse patients for a duration of more than one month were;

likely to have a neoplastic cause more than non neoplastic cause

Conclusions: the incidence of non neoplastic causes of hoarseness in patients more than 40 year old are more common than neoplastic causes.

Moreover. hoarse patients who have a longer duration of hoarseness have a more chance to have neoplastic cause than non- neoplastic cause.

Introduction

Hoarseness is defined as an abnormality in the quality of phonation. The abnormality is often described as being breathy, rough, noisy, and/or harsh.[1] There are many different conditions that result in hoarseness. However, these conditions share common physiologic pathways leading to the symptom. In this study, we concentrate on people with hoarseness above 40-year olds. Such people are considered a risk group to Laryngeal malignancy more than the younger age groups.[2] Also in this study we concentrate on the duration of the hoarseness on the basis of more or less than one month from the start of hoarseness, as it is justified by the widely accepted medical practice that if hoarseness persist for more than one month then the larynx should be visualized to exclude neoplastic causes.[3]

Patients and Methods:

Patients;

The present study is a cross sectional study . It involved 80 cases of patients with hoarseness of voice who consulted us at E.N.T.outpatient clinic at department of Otolaryngology in Al-Diwaniya teaching hospital between April 2011 and December 2011.

The age range of patients is 40-80 years, the patients are 58 males and 22 females.

Methods;

All patients were examined by laryngeal mirror & flexible or rigid naso-oro-laryngoscope. Some of them needed to be examined by direct laryngoscope with histopathological examination of the biopsied surgical specimen.

The patients are divided into two groups according to the causes, which are: neoplastic (including: laryngeal carcinoma, vocal cord polyp, vocal cord nodule, laryngeal cyst, intubation granuloma, benign tumor) and non neoplastic (including: infective

laryngitis, acid laryngitis, allergic laryngitis ,vocal cord palsy, psychogenic, Reinke's odema, traumatic).

The two groups of hoarse patients are also divided on the basis of one month duration from the start of hoarseness into more or less than one month groups.

Questionnaire

Results:

3:1 Age and sex distribution:

It has been found that male are affected by hoarseness more than female and the peak incidence of hoarseness is in the 5th decade of life as shown in table 3:1 and figures 3:1a&3:1b.

No.	Name of the patient	Occupation	Habits	Age	Sex	Cause of Hoarseness		Duration of Hoarseness	
						Neoplastic	Non-neoplastic	> 1 month	< 1 month

27.5%

N=22

Table (3:1) shows the distribution of patients according to age groups and gender.

72.5%

N=58

Age (years)	Male	%	Female	%	Total	%
40-50	25	31.25%	9	11.25%	34	42.5%
51-60	16	20%	8	10%	24	30%
61-70	14	17.5%	4	5%	18	22.5%
71-80	3	3.75%	1	1.25%	4	5%
Total	58	72.5%	22	27.5%	80	100%

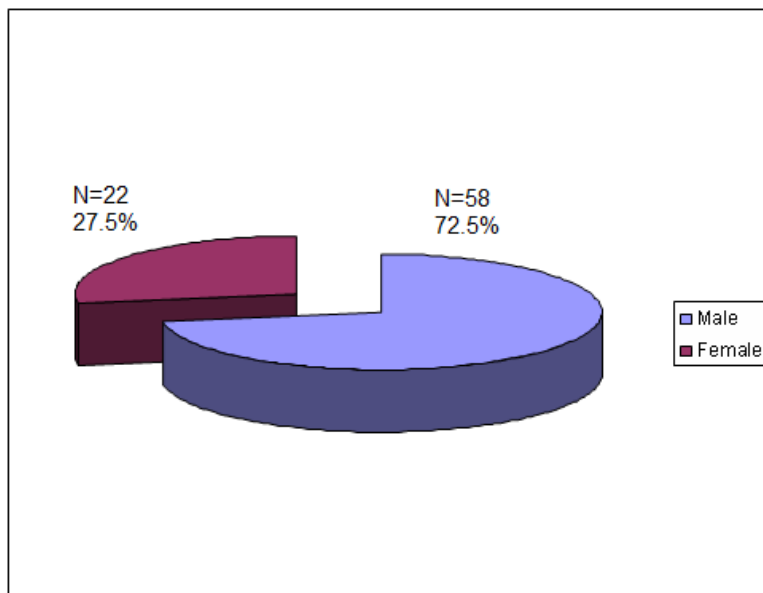


Figure (3:1a) shows gender distribution

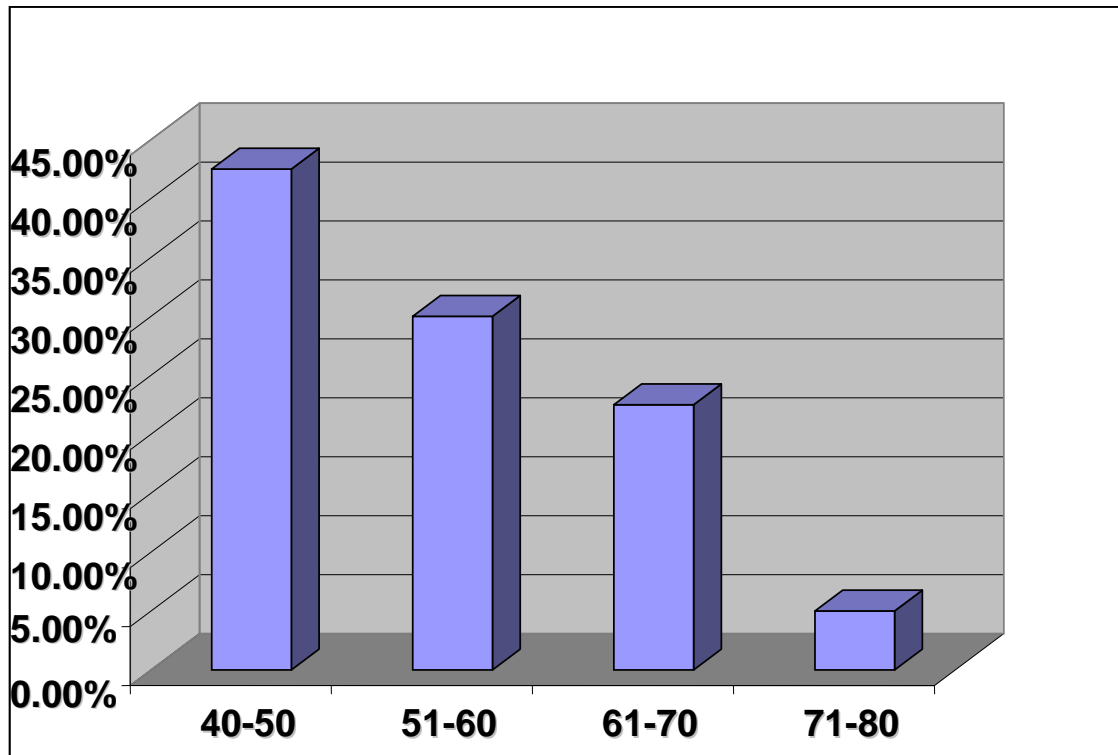


Figure (3:1b) shows age distribution

Discussion

It has been found in the present study that the incidence of hoarseness(in patients above the age of 40-years) due to non neoplastic causes is more common than that of neoplastic causes. It has also been found that the incidence of neoplastic causes in hoarse patients for more than one month duration is more than the incidence of non neoplastic causes (18 cases out of 26 hoarse patient have neoplastic causes giving an incidence of 69.23%).

These results agree with:

T. Kondogana, E. Seifertb (2003)[18]

In this prospective study, they found that the incidences of non neoplastic causes of hoarseness above 40 years are more common than neoplastic causes [the commonest cause is vocal cord palsy followed by vocal cord atrophy (presbyphonia)].

Sambhu Baitha et al (1999)[19].

In this prospective study, comprising of 110 hoarse patients, the non neoplastic causes of hoarseness in above 40-year olds are more than the neoplastic causes

[infective laryngitis is the most common cause of hoarseness giving an incidence of 51% followed by laryngeal carcinoma giving an incidence of 14.54%]

Lundy Ds. Silvac et al (1998)[20]

In this retrospective study, they found that, the incidence of non neoplastic causes of hoarseness were more than neoplastic causes in 393 hoarse patients. Presbyphonia is the commonest cause, followed by vocal cord palsy.

Chopra, Kapora (1997)[21]

In this study, they found that 68% of patients with hoarseness more than one month duration have neoplastic causes.

Kandogan T.,Olgun L.,Gultekin G. (2003) [22]

In this study,they found that the most common cause of hoarseness was benign more than malignant in 98 patients above 60 years of age.

Naomi D. Gregory,Swapna Chandran,Deborah Lurie,Robert T. Sataloff.(2010).[23]

In this study,they found that Non-neoplastic causes(Gerd,URTI,..) are the commonest in elderly.

Results of our study are in contrast with: P. G. C. Glachman & C. A. Van Hasselt (1992)[24]

In this retrospective study, the records of 169 hoarse patients were assessed. They found that the neoplastic causes of hoarseness were more common than non neoplastic causes. [vocal cord nodule is the commonest cause of hoarseness giving an incidence of 43%].

Metha (1985)[25]

In this study, they found the same incidence of neoplastic causes and non neoplastic causes of hoarseness in the hoarse patients for more than one month duration.

Muhammed Hafeez, Arif Raza Khan, Naseer Ahmed, Noor Sahib Khan (2010)[26]

In this study they found the laryngeal growth "Neoplastic" is the commonest aetiology in elderly.

Sheikh Saadat Ullah Waleem, Shaukat Ali, Muhammad Ischaqri (2005)[27]

In this study of 100 cases, they found that neo-plastic causes (l.growth), is the most common cause of hoarseness in elderly.

Morrison MD, Gore Hickman P. (1986) [28]

In this study they found, that Ca. larynx is the commonest cause of voice disorder in the elderly.

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