

Aetiology of Hoarseness in Patients above 40 Years Old.

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الخلاصة

اجريت هذه الدراسة لتحديد اهم الاسباب المؤدية الى بحة الصوت في المرضى الذين تزيد اعمارهم عن 40 سنة وكذلك العلاقة بين الفترة الزمنية لبحة الصوت وأسبابها. هذه الدراسة هي دراسة مستقبلية في طبيعتها. تضمنت تقييم 80 مريض يعانون من بحة الصوت بين شهر نيسان عام 2006 و شهر نيسان عام 2008 في عيادة الاذن الف الحنجرة في مستشفى الديوانية التعليمي. كان هناك 57 حالة من اصل 80 مريض يعانون من بحة الصوت قد حدثت لأسباب غير ورمية وهذه الاسباب (التهاب الحنجرة الوبائي 28,75% التهاب الحنجرة الحامضي 21,75% , التهاب الحنجرة التحسسي 16,25% يشلل الحبل الصوتي 2,5% اسباب نفسية 2,5% أسباب صدمية 0% وذمة رنكيز 0% يهيمادنت بحة الصوت في المرضى المتبقين 3 اسباب ورمية وهذه الاسباب 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 تزيد بالمرضى الذين يعانون من بحة الصوت لفترة اطول من شهر فسلحتنتج ان نسبة حدوث بحة الصوت لاسباب غير ورمية في المرضى الذين اعمارهم تزيد عن 40 اكثر من نسبة حدوثها لاسباب ورمية علاوة على ذلك. هناك علاقة طردية بين طول فترة الزمنية لبحة الصوت والاسباب الورمية.

Summary

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. The study is prospective in nature. It considers 80 patients with hoarseness who were assessed between April 2006 and April 2008 at my own clinic and at E.N.T. outpatient clinic, Department of Otolaryngology in AL-Diwania Teaching Hospital, in Al-Diwaniya City, Iraq. 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% Traumatic n=0,0%, Rienke's oedema n=0,0%) while hoarseness occurs in the remaining 23 patients due to neoplastic causes, giving an incidence of 28.75% (laryngeal carcinoma n=12,15%, Polyp n=6,7.5%, Nodule n=3,3.75%, 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. The incidence of non neoplastic causes of hoarseness in patients more than 40 years 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

Objectives of the study:

This study is designed to:

1. Determine the most common causes of hoarseness in patients above 40 year old.
2. Know the relation between the duration of hoarseness and its causes.

Introduction

Hoarseness is defined as an abnormality in the quality of phonation.^[1] The abnormality is often described as being breathy, rough, noisy, and/or harsh. 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. In this study we also try to know the most common causes of hoarseness in this risk age group.

Material and Methods

The present study is prospective. It studies 80 cases of patients with hoarseness of voice who consulted me at my own clinic and at E.N.T.Outpatient clinic, Department of Otolaryngology in Al-Diwaniya teaching hospital between April 2006 and April 2008. The age range of patients is 40-80 years. The patients are 58 males and 22 females. All patients were examined by indirect laryngoscopic mirror. Some of them needed to be examined by direct laryngoscope & biopsy and histopathological examination for surgical speciment. The patients are divided into two groups according to the causes, which are: neoplastic (including: laryngeal carcinoma, polyp, nodule, cyst, granuloma, benign tumor) and non neoplastic (including: infective laryngitis, acid laryngitis, allergic laryngitis, vocal cord palsy, psycogenic, Reinke's odema, traumatic). The two groups of hoarse patients are also subdivided on the basis of one month duration from the start of hoarseness. The selection of one month duration is justified by the widely accepted medical practice that if hoarseness persists for more than four weeks the larynx should be seen to exclude neoplastic causes.^[2]

Results

It has been found in this study that hoarseness occurs in 57 out of 80 patients due to non neoplastic causes, giving an incidence of 71.25% of all hoarse patients, while it occurs in the remaining 23 patients due to neoplastic causes, giving an incidence of 28.75%.

Table (1) shows the incidence of causes of hoarseness in above 40-year olds.

Nonneoplastic causes	n. of patients	%	neoplastic causes	n. of patients	%
Infective laryngitis	23	28.7%	Laryngeal carcinoma	12	15%
Acid laryngitis	15	21.2%	Laryngeal polyp	6	7.5%
Allergic laryngitis	13	16.2%	Laryngeal nodule	3	3.75%
Vocal cord palsy	2	2.5%	Laryngeal cyst	1	1.25%
Psychogenic	2	2.5%	Laryngeal granuloma	1	1.25%
Traumatic & Reinke's oedema	0	0%	Benign tumor	0	0%
Total	57	71.1%		23	28.75%

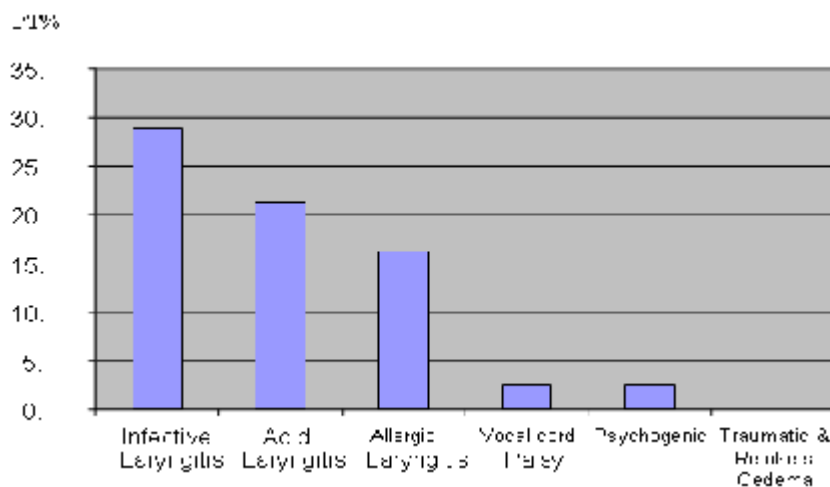


Figure (1) shows the incidence of non neoplastic causes of hoarseness in above 40-year olds.(n=57, 71.25%)

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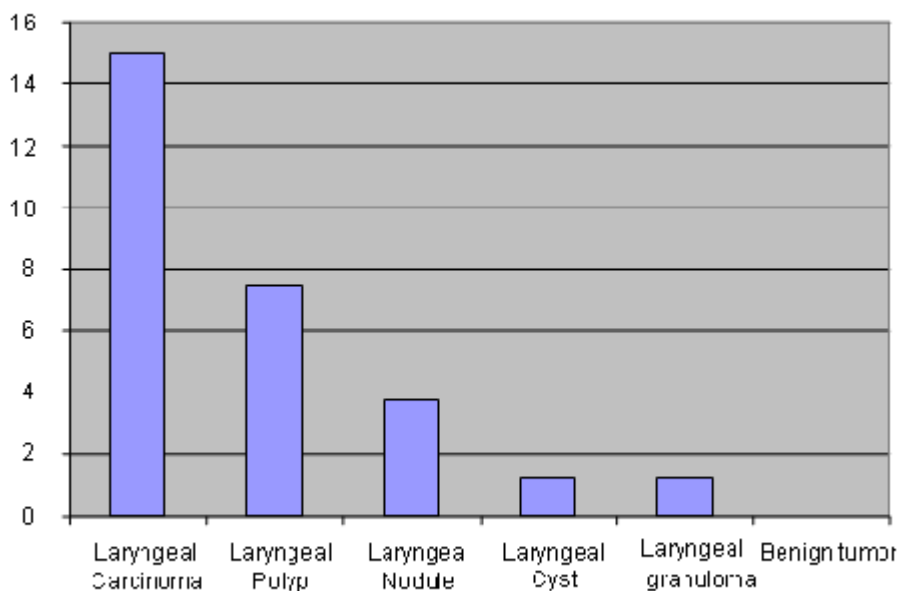


Figure (2) shows the incidence of neoplastic causes of hoarseness in above 40-year olds. (n=23, 28.75%)

It has also been found that patients who have hoarseness for more than one month duration are more likely to have neoplastic cause than non neoplastic cause.

Table (2) the hoarse patients are divided into two groups on the basis of one month duration from the start of hoarseness.

Duration of Hoarseness at presentation	Patient have neoplastic cause	Patient have non neoplastic cause
> 1 month	18	8
< 1 month	5	49

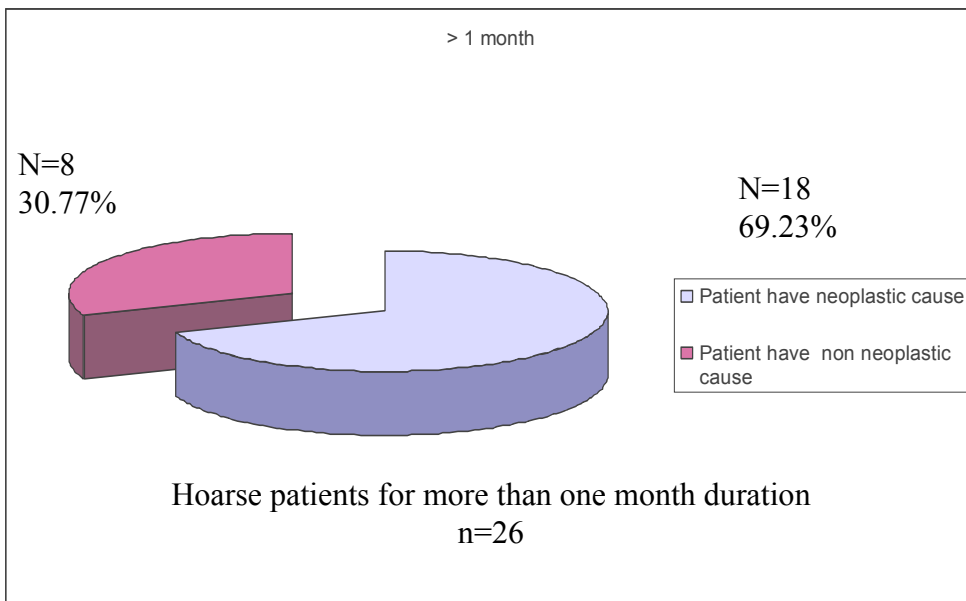


Figure (3) shows the relationship between the length of hoarseness duration and its causes.

Discussion

It has been found in the present study that the incidence of hoarseness in patients above 40-year old 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)^[3], Sambhu Baitha et al (1999)^[4], Lundy Ds. Silvac et al (1998)^[5], Chopra, Kapora (1997)^[6], but these result in contrast with: P. G. C. Glachman & C. A. Van Hasselt (1992)^[7], Metha (1985)^[8].

Conclusions

1. The incidence of non neoplastic causes are more common of neoplastic causes of hoarsness in above 40-years olds.
2. Infective laryngitis is the most common cause of hoarseness in above 40-year olds.
3. Laryngeal carcinoma is the commonest neoplastic cause of hoarsness in above 40-year olds.
4. The patients who have a longer duration of hoarsness have more chance to have neoplastic cause than non neoplastic cause.

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