# Hoarseness: A Serious but Neglected Symptom.

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#### Abstract:

Introduction: Hoarseness is an abnormal change in voice and is related to disorders in the vocal cords. Causes of hoarseness include:- Laryngitis, voice abuse, benign vocal cord lesions, vocal haemorrhage, Laryngopharyngeal reflux, Laryngeal cancer, etc. Hoarseness should be seen and evaluated promptly in hospital by an otolaryngologist within one week in children and about ten days in adults. However, most patients and even Physicians do not reasons or believe hoarseness is a serious enough problem to present early in hospital.

**Results:** Two hundred and thirty patients were evaluated within the study period. Male to Female ratio of 1.53:1 was observed. 120 patients presented in hospital within 0-1year, 70 patients within 2 years, 25 patients within 3-4 years and 15 patients within 5 years and above.

Most common cause of hoarseness was the common cold-60 cases, followed by Laryngitis-35 cases and Laryngeal cancer accounted for 25 cases.

**Conclusion:** Hoarseness is a serious symptom that should be taken seriously by both the patient and the physician and be promptly evaluated in hospital as it may result from a malignant condition like laryngeal cancer.

Keywords: Hoarseness, Neglected, Serious, Symptom.

#### I. Introduction

Hoarseness is a general term that refers to abnormal changes in voice- which could present or sound breathy, raspy, strained, or may show changes in volume or pitch. Hoarseness is related to disorders in the vocal cords of the larynx<sup>1, 2,3</sup>. The vocal folds remain apart during breathing, while they come together while speaking or singing as they are vibrated by air leaving the lungs thus producing sound. Oedema or lumps on the vocal folds hinder vibration, thus altering the voice quality, volume and pitch. Causes of hoarseness will include conditions like:-Acute laryngitis, voice misuse or abuse, benign vocal cord lesions (e.g. nodules, polyps, cysts); haemorrhage, gastro-esophageal reflux, Laryngopharyngeal reflux, smoking, Neurological Diseases or Disorders such as Parkinson's or stroke, spasmodic dysphonia, paralyzed vocal folds, allergies, thyroid problems, laryngeal trauma and occasionally menstruation<sup>1,2,3</sup>. Very serious conditions like laryngeal cancer can also cause hoarseness which is why it is important to have chronic hoarseness evaluated promptly by an otolaryngologist<sup>4,5,6</sup>. Common cold or flu may also cause hoarseness and can be evaluated by family physicians, pediatricians or internists who have learned to examine the larynx, which should be done promptly as delay may affect the outcome and result in complications<sup>1,3</sup>.

Generally, however most patients do not see or believe hoarseness is a serious problem enough to seek medical advice, even when they deem it fit to present in hospital, some of the physicians dismiss it without adequate evaluation. However when it turns out to be a serious condition like laryngeal cancer, the patient has a 100% difficult problem to deal with, as it is noted that the survival rate among patients with laryngeal cancer has decreased due to late presentation and increase in the non surgical treatment option for laryngeal cancer by many patients<sup>5,6</sup>.

**Method:** This Study is carried out in the ENT unit of the department of Surgery, Bingham University Teaching Hospital Jos covering a period of 2yrs (i.e. Jan. 2013 –Dec. 2014). The study looked at Hoarseness as a presenting symptom, the clinical characteristics/Demography and the duration at presentation. 230 patients were seen within the study period with Hoarseness and a variety of causes were seen and analyzed.

**Results:** Two hundred and thirty patients were recorded within the study period with Hoarseness. Of this number, one hundred and thirty one were males and ninety one females giving a male to female ratio of 1.53:1 within an age range of zero to seventy years (Table I).

One hundred and twenty patients (120)(52.17%) presented in hospital within 0-1yr of the symptom; seventy patients (70)(30.43%) within 2yrs. Twenty five patients (25)(10.87%) within 3-4yrs and fifteen patients (15)(6.52%) within five years and above(Table I). Clinical characteristics showed common cold as the most

common cause for presentation in hospital with sixty(60) patients (26.09%) within the study period; laryngitis - thirty five (35) patients, (15.22%); GERD - thirty(30) patients, (13.04%); Laryngeal Ca - Twenty five (25)patients, (10.86%) and Laryngeal cyst – with the lowest number of patients - eight (8) (3.48%) (Table III). It is also noted that a lot of the patients in this study visited traditional healers or ignored the symptom for awhile before presenting in hospital.

#### II. Discussion

Hoarseness to whatever degree is a common feature (symptom) within the community. Presentation with hoarseness in hospital is not very frequent due to the fact that many people regard it as self limiting. Hoarseness in this study is found to occur or affect all age groups (i. e - ages 1-70); however it is commoner within the fourth and the sixth decades. The study also shows that it is commoner in males as compared to females in all age groups with a male to female ratio of 1.53:1(Table II). This is however subject to more studies as there is paucity of literature for comparism in this respect. This study also found that about 120 patients (52.17%) presented in hospital within 0-1 year of having the symptom; 70 patients (30.43%) within 2 years; 25 patients (10.87%) within 3-4 years and 15 patients (6.52%) within 5 years and above( Table I). This pattern indicates the fact that most people do not take hoarseness serious or they would present within one or two weeks of the symptom (i.e. - early presentation).

Clinical characteristics showed common cold as the most common cause of presentation, followed by laryngitis (Table III). The common cold which is of frequent occurrence, thou is the highest seen is expected to be higher – but because most people including the physicians do not take it serious, only a few are seen in the clinic.

Laryngeal carcinoma as a cause of hoarseness in this study accounts for about 10.86% which is reasonably high, makes this symptom quite serious a neglected one even thou it might be argued that much more chronic hoarseness is most likely in Laryngeal carcinoma (Table III). Early presentation with hoarseness in hospital is advisable to be able to detect serious conditions like Laryngeal cancer for better treatment outcome<sup>5,6</sup>.

## III. Conclusion

Hoarseness thou a very common symptom resulting from many common conditions like the common cold which is self-limiting, a very serious condition like Laryngeal cancer can cause it. It is therefore advised that hoarseness be reported promptly in hospital for adequate investigation to rule out any serious condition.

Hoarseness – Duration at Presentation (**Table I**)

	Time	Number	Percentage (%)
1	0—1 year	120	52.18%
2	1 – 2 Years	70	30.43%
3	3 – 4 Years	25	10.87%
4	5 Years and Above	15	6.52%
	Total	230	100%

Hoarseness – Demography (Table II)

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	Age (Years)	Male	Female	Total			
1	1 – 10	10	8	18			
2	11 – 20	9	6	15			
3	21 – 30	7	5	12			
4	31 -40	30	15	45			
5	41 – 50	35	20	55			
6	51 - 60	32	28	60			
7	61 – 70	16	9	25			
8	TOTAL	139	91	230			

Clinical Characteristics (Table III)

	Diagnosis	Number	Percentage (%)
1	Common Cold	60	26.09%
2	Laryngitis	35	15.22%
3	GERD	30	13.04%
4	Laryngeal Ca	25	10.86%
5	Voice Abuse (Misuse)	20	8.70%
6	Vocal Nodule	15	6.52%
7	Neurological	15	6.52%
8	Respiratory Papillomatosis	12	5.22%
9	Laryngeal Polyp	10	4.35%
10	Laryngeal Cyst	8	3.48%
11	TOTAL	230	100%

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## **Competing interest**

The authors declare no competing interest.

## **Authors Contributions:**

Nlt Collected data, analyzed data, carried out literature search and prepared the manuscript; while AAA and Jne the write up.

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