Role of upper endoscopy with Multi-slice computed tomography in diagnosis of patients with chronic throat symptoms

Hala Ibrahim, Wael M. Abdelghany, Wafaa Abdelhamid, Ahmed A. Sadek and Gasser El-Zaeem
Department of Tropical Medicine, El-Minia Faculty of Medicine

Abstract
Introduction: Chronic throat symptoms include hoarseness of voice in the form of aphonia or dysphonia, frequent throat clearing, sore throat with pain, burning or irritation, excessive or sticky throat mucus, feelings of post nasal drip, nonproductive cough , Globus pharyngeus and cervical dysphagia. Aim of the Study: To find if there is benefit of the use of upper Gastro intestinal endoscopy in diagnosis of patients with chronic refractory throat symptoms in comparison with combined laryngoscope and MSCT of the Neck. Patients and Methods: The current study is a Pilot study conducted on: 50 patients suffering from chronic refractory throat symptoms recruited from ENT outpatient clinic at minia university hospital from July 2018 to March 2019. Results: This study is a pilot study that was conducted in Minia University Hospital at endoscopic unit from July 2018 to March 2019. Conclusion: Use upper GI endoscopy as an initial investigation in patients with refractory throat symptoms with normal laryngoscope and CT finding should be advocated especially when the cost of endoscopy is low and high risk of complication as Baretts esophagous or complicated GERD.

Keywords: upper endoscopy, throat symptoms

Introduction
Chronic throat symptoms include hoarseness of voice in the form of aphonia or dysphonia, frequent throat clearing, sore throat with pain, burning or irritation, excessive or sticky throat mucus, feelings of post nasal drip, nonproductive cough , Globus pharyngeus and cervical dysphagia. (Koek GH et al., 2003)

Gastro esophageal reflux(GER), defined as the entry of gastric contents into the esophagus, is a physiologic event but is also a major pathological factor. The common clinical condition in which GER leads to esophageal symptoms or lesions is referred to as gastro esophageal reflux disease (GERD), of which heartburn and acid regurgitation are the classical symptoms and reflux esophagitis and Barrett’s esophagus are the most important lesions. (Poelmans J, et al., 2006 )

Aim of the Study
To find if there is benefit of the use of upper Gastro intestinal endoscopy in diagnosis of patients with chronic refractory throat symptoms in comparison with combined laryngoscope and MSCT of the Neck.

To examine if there is association between chronic throat symptoms and upper GIT diseases

Patients and Methods
The current study is a Pilot study conducted on: 50 patients suffering from chronic refractory throat symptoms recruited from ENT outpatient clinic at minia university hospital from July 2018 to March 2019.

Throat symptoms was: dysphagia, globus pharyngeus, frequent throat clearing, hoarsness of voice, spitting of blood and cough

All subjects were subjected to the following:
1- Thorough History Taking including otolaryngological history and history of any GIT diseases
2. ENT examination and direct laryngoscopy for all patients
3. Multi slice CT Examination
4. Upper GI Endoscopic Examination of

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esophagus with biopsy taken from the lesions if exist and from the upper, middle and lower esophagus
5. **histopathology** of the samples taken Upper GI Endoscopy and Biopsy, Histopathology

**Results**
This study is a pilot study that was conducted in Minia University Hospital at endoscopic unit from April 2018 to November 2018. Fifty consecutive ENT patients with chronic unexplained refractory ENT symptoms. Twenty males (44%) and 28 (56%) females with age range 22-80 Mean age 54.8±15.6 were recruited for the study. Two patients had hypertension; 5 (10%) were diabetic and 8% had thyroid disease. Four patients were smokers and no history of alcohol drinking (0%)

**Table 1: Epidemiological data of the studied patients**

<table>
<thead>
<tr>
<th></th>
<th>N= 50</th>
</tr>
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<tbody>
<tr>
<td><strong>Age</strong> (Range, Mean ± SD)</td>
<td>22-80 54.8±15.6</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>27(44%)</td>
</tr>
<tr>
<td>Female</td>
<td>23(56%)</td>
</tr>
<tr>
<td><strong>History of chronic disease</strong></td>
<td></td>
</tr>
<tr>
<td>Hypertension</td>
<td>2(4%)</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>5(10%)</td>
</tr>
<tr>
<td>Thyroid disease</td>
<td>4(8%)</td>
</tr>
<tr>
<td><strong>Smoking</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4(8%)</td>
</tr>
<tr>
<td><strong>Alcohol</strong></td>
<td>0(0% )</td>
</tr>
</tbody>
</table>

**Discussion**
In this study, we aimed to find if there is benefit of the use of upper gastro intestinal endoscopy in diagnosis of patients with chronic refractory throat symptoms in comparison with combined laryngoscope and MSCT of the Neck. Also to examine if there is association between chronic throat symptoms and upper GIT diseases.

Patients with suspected gastroesophageal disease related throat signs and symptoms are often initially treated by ENT physicians, and the non responders are often referred to gastroenterologists who contend that many such patients do not have reflux. Thus, identifying and treating laryngitis associated reflux has proven to be challenging to both ENT physicians and gastroenterologists (Ahmed TF, et al., 2010)

**Conclusion**
Patients with refractory throat symptoms, there is high prevalence of upper esophagitis and gastroesophageal reflux.

In the present study we investigated the presence of abnormality during the upper GI endoscopy in consecutive patients with upper refractory throat symptoms

Chronic throat symptoms include hoarseness of voice in the form of aphonia or dysphonia, frequent throat clearing, sore throat with pain, burning or irritation, excessive or sticky throat mucus, feelings of post nasal drip, nonproductive cough, Globus pharyngeus and cervical dysphagia. (Koek GH et al., 2003)
Use upper GI endoscopy as an initial investigation in patients with refractory throat symptoms with normal laryngoscope and CT finding should be advocated especially when the cost of endoscopy is low and high risk of complication as Barrett’s esophagus or complicated GERD.

References