A Look Into the Comfort Level of Managing Common Head and Neck Disease Among Medical Students and Primary Care Residents

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Introduction

Diseases and conditions affecting the head and neck are commonly seen in the outpatient and primary care specialties. These conditions can represent up to 25-30% of daily outpatient visits in pediatrics and internal medicine. However, exposure to clinical otolaryngology is minimal in many medical schools, possibly resulting in poor understanding of these important clinical entities.1

Objectives

1. To assess comfort levels in managing common, primary care head and neck disease during the four years of medical school and the three years of primary care residency.

2. To determine which specialty services participants would refer these hypothetical patients if they were not comfortable with management.

Methods and Materials

This was a cross-sectional survey conducted using Survey Monkey (www.surveymonkey.com) of George Washington University Medical Students (N=256 out of 692 [37%]), George Washington University Internal Medicine Residents (N=15 out of 106 [14%]) and Children’s National Medical Center Residents (N=50 out of 100 [50%]). Data was analyzed with Microsoft Excel.

We asked medical students to imagine that they were starting their primary care residency this month. Then, we asked medical students and residents how confident (“Very Confident, Confident, Unsure, Not Confident”) they felt managing the conditions listed in table 1.

Table 1: Common outpatient head and neck diseases

<table>
<thead>
<tr>
<th>Condition</th>
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<tbody>
<tr>
<td>Rhinitis/seasonal allergies</td>
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<tr>
<td>Otitis media</td>
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<tr>
<td>Otitis externa</td>
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<tr>
<td>Sore throat</td>
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<tr>
<td>Hoarseness</td>
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<tr>
<td>Stridor</td>
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<tr>
<td>Tonsillitis</td>
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<tr>
<td>Foreign body in external ear canal</td>
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<tr>
<td>New neck mass</td>
</tr>
<tr>
<td>Foreign body in mouth</td>
</tr>
<tr>
<td>Sleep apnea</td>
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<tr>
<td>Retrotympanic abscess</td>
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<tr>
<td>Dysphagia</td>
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<tr>
<td>Hoarseness</td>
</tr>
<tr>
<td>Vertigo</td>
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<tr>
<td>Nasal polyps</td>
</tr>
<tr>
<td>Broken nose</td>
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<tr>
<td>Thyroid nodules</td>
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<tr>
<td>Thyroid nodule</td>
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<tr>
<td>Facial nerve paralysis</td>
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<tr>
<td>Tinnitus</td>
</tr>
<tr>
<td>Left hip pain</td>
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<tr>
<td>Tonsil/lipoma</td>
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<tr>
<td>Tracheotomy care</td>
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<tr>
<td>Persistent salivary gland swelling</td>
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<tr>
<td>Sudden hearing loss</td>
</tr>
</tbody>
</table>

These conditions are considered common outpatient head and neck diseases both in previous studies and in our otolaryngology department.1,3

We then asked medical students and residents to whom they would refer these hypothetical patients if they could not manage the patient on their own. They could select from Neurology, Otolaryngology, General Surgery, Pulmonology, Plastics Surgery and Other.

Results

Figure 1: Percent of medical students by year responding “Very Confident” or “Confident”

Figure 2: Percent of residents by year responding “Very Confident” or “Confident”

Figure 3: Average percent of residents and medical students responding “Very Confident” or “Confident”

Figure 4: Percent of medical students referring to various sub-specialties.

Figure 5: Percent of Residents referring to various sub-specialties.

Discussion

Our results show a correlation between year of training and comfort in care (more training correlates to higher level of comfort), but even the most advanced training level residents (PGY3) did not feel confident managing several entities, including tracheotomy care, persistent salivary gland swelling and sudden hearing loss.

In addition, although Otolaryngology was not chosen as the specialty “best fit” to handle the complicated management of every surveyed disease, there tends to be a consensus across all training levels.

Perceptions on where complicated patients should be referred could be, in part, due to the environment in which medical students and residents first learned about individual diseases. This does not explain, however, that these trends exist in both George Washington medical students and residents alike despite the fact that residents received their medical education from different institutions. Furthermore, Otolaryngology commonly manages neurologic, endocrine and pulmonary diseases as they pertain to the head and neck. Thus, for example, although vertigo can be a neurologic condition, Otolaryngologists train to diagnose and manage it. Future studies should focus on referring tendencies and the provider’s reasoning leading to subspecialty selection.

We conclude that participants are not comfortable with the care of some common outpatient head and neck diseases, but our study did not assess causes for this discomfort, necessitating further studies. Future studies should focus on drivers of this uncertainty to help design interventions to improve primary care providers’ knowledge, attitudes, and skills surrounding these important conditions.

Works Cited


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