The impact of infections in the otolaryngologist’s practice

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To the Editor,

Upper respiratory infections (URI) are relevant in the daily otolaryngologic practice (1–8). As the otolaryngologist visits both children and adults, an extensive array of infectious diseases represents the daily activity. Namely, the otolaryngologist takes care of patients with acute, chronic, and recurrent infections. However, it is unexpected that no survey has explored the actual quote of these disorders in clinical practice. Therefore, the current survey evaluated the impact of the different upper airway infections in the otolaryngologic clinic. A panel of international otolaryngologists participated in this initiative using an internet platform. The list included members of the Italian Society of Rhinology and International Federation of Otorhinolaryngological Societies: 8 Italians, 1 Lithuanian, 1 Indian, one from Mexico, one from Panama, and one from Venezuela.

The questionnaire consisted of a series of specific requests, as reported in Table 1.

The results of this survey provided some interesting outcomes. First, URI accounts for 36% of visits performed in an otolaryngologic practice, with a wide range (from 15 to 60%). Second, pediatric cases accounted for about 20% of URI seen by an otolaryngologist; this low prevalence probably depended on the frequent consultation by the paediatrician.

About adult URI, acute infections accounted for 38%, with a broad range (9–78%); the most common acute URI were rhinosinusitis (20%), otitis (17%), and pharyngotonsillitis (14%). The prevalence of chronic URI in adults was 48%, with a huge range (2–85%); the most common chronic URI were rhinosinusitis (28.5%), otitis (23%), and rhinitis (16%).

Acute infections accounted for 55.5% of paediatric URI, with an extensive range (3–92%). The most common acute URI in children were otitis (29.6%), pharyngotonsillitis (27%), and common cold (10.5%). The prevalence of chronic paediatric URI was 40%, with a range between 20 and 80%. The most common chronic URI in children were pharyngotonsillitis (38.2%), otitis (26.2%), and rhinitis (10.5%).

As concerns treatments for URI, all otolaryngologists used intranasal corticosteroids, 71% intranasal hyaluronic acid, 64% bacteriotherapy/probiotics, 43% intranasal glycyrrhetic acid, and 28% intranasal lactoferrin. The different attitudes also depended on the availability of some products.

The current survey showed that URI represents a relevant impact in otolaryngologic practice. There is a different prevalence between children and adults. Indeed, pediatric consultations concerned more frequently acute URI, vice versa, chronic URI were more common in adult patients. Consistently, otitis was more frequent in children, rhinosinusitis in adults. This survey also highlighted a significant variability of frequencies, and it could depend on geographical differences and specific interests of the single otolaryngologist.
In conclusion, the current survey demonstrated that upper respiratory infections account for a relevant quote of the otolaryngologic practice, differences exist between pediatric and adult patients, and otolaryngologists have different prescriptive attitudes.

Conflict of Interest: Each author declares that he or she has no commercial associations (e.g. consultancies, stock ownership, equity interest, patent/licensing arrangement etc.) that might pose a conflict of interest in connection with the submitted article.

Table 1. International Survey on the management of infectious ORL diseases in clinical practice.

| Question                                                                 | Answer                      |
|-------------------------------------------------------------------------|-----------------------------|
| What is the percentage of patients visited in your clinic with infectious diseases? | 36% (range 15-60%)          |
| How many (%) of them are children (0-17 years)?                         | 21% (range 4-50%)           |
| In adults, what is the rate of acute infectious diseases?                | 38% (range 9-78%)           |
| The prevalence of the common cold is                                   | 11.25% (range 1-30%)        |
| The prevalence of acute rhinosinusitis                                 | 20% (range 3-60%)           |
| The prevalence of acute otitis                                         | 17% (range 1-50%)           |
| The prevalence of acute pharyngotonsillitis                            | 14% (range 1-40%)           |
| The prevalence of acute laryngitis                                     | 6.7% (range 1-20%)          |
| The prevalence of acute tracheitis                                     | 2.8% (range 0-5%)           |
| In adults, what is the rate of chronic infectious diseases?             | 48% (range 2-85%)           |
| The prevalence of chronic rhinitis                                     | 16% (range 1-40%)           |
| The prevalence of chronic rhinosinusitis                               | 28.5% (range 1-60%)         |
| The prevalence of chronic otitis                                       | 23% (range 1-50%)           |
| The prevalence of chronic pharyngotonsillitis                          | 11.6% (range 1-55%)         |
| The prevalence of chronic laryngitis                                   | 7.2% (range 0-20%)          |
| In children, what is the rate of acute infectious diseases?             | 55.5% (range 3-92%)         |
| The prevalence of the common cold is                                   | 10.5% (range 1-30%)         |
| The prevalence of acute rhinosinusitis                                 | 10% (range 1-25%)           |
| The prevalence of acute otitis                                         | 29.6% (range 1-60%)         |
| The prevalence of acute pharyngotonsillitis                            | 27% (range 1-50%)           |
| The prevalence of acute laryngitis                                     | 6.4% (range 1-12%)          |
| The prevalence of acute tracheitis                                     | 3% (range 0-8%)             |
| In children, what is the rate of chronic infectious diseases?           | 40% (range 20-80%)          |
| The prevalence of chronic rhinitis                                     | 10.5% (range 1-30%)         |
| The prevalence of chronic rhinosinusitis                               | 9.3% (range 1-25%)          |
| The prevalence of chronic otitis                                       | 26.2% (range 5-45)          |
| The prevalence of chronic pharyngotonsillitis                          | 38.2% (range 15-60%)        |
| The prevalence of chronic laryngitis                                   | 7.2% (range 5-10%)          |
| Do you use local Bacteriotherapy?                                      | 9 Yes; 5 No                 |
| Do you use intranasal lactoferrin?                                     | 4 Yes; 10 No                |
| Do you use intranasal glycyrrhetic acid?                               | 6 Yes; 8 No                 |
| Do you use intranasal corticosteroids?                                 | 14 yes                      |
| Do you use intranasal hyaluronic acid?                                 | 10 Yes; 4 No                |

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