



Assisted Otolaryngology Telemedicine in a Remote Colombian Indigenous Population

Jorge Luis Herrera Ariza ⁽¹⁾, Juan Felipe Vélez Rodríguez ⁽²⁾, Antonieta Gómez Mendoza⁽²⁾, María Alejandra García Chabur ⁽³⁾, Daniel Peñaranda García ⁽²⁾, Dominique Daniela González Casas ⁽²⁾.

1. Full Professor, Otorhinolaryngology Service, Health Sciences University Foundation - Hospital de San José de Bogotá
2. Resident of Otorhinolaryngology University Foundation Health Sciences - Hospital de San José de Bogotá
3. Otolaryngology and Otoneurology Fellow University Foundation of Health Sciences - Hospital de San José de Bogotá

Correspondence author : Antonieta Gomez , agomez2@fucsalud.edu.co

Introduction

Telemedicine refers to the use of telecommunication technology to provide health access to different populations (1, 2). In Latin America and Colombia, various telemedicine programs have been developed, but the implementation of one applied to Otorhinolaryngology has not been described (3).

Objectives

Describe the experience of the telemedicine program of the Otorhinolaryngology service of the San José Hospital with patients from the Guainía department, between 2021 and 2022

Methods

Observational cross-sectional study in which the clinical histories of the patients attended in the otolaryngology teleconsultation in synchronous interactive modality were included.

It reports sociodemographic characteristics, reasons for consultation, physical examination findings, diagnosed pathologies, and the proportion of referrals for face-to-face assessment.

The descriptive statistical analysis was performed using Stata 17, relative and absolute frequencies were calculated for the qualitative variables. As for the quantitative variables, they are presented with means and standard deviations. The project was approved by the Committee for Ethics and Research in Human Beings of the Hospital de San José.

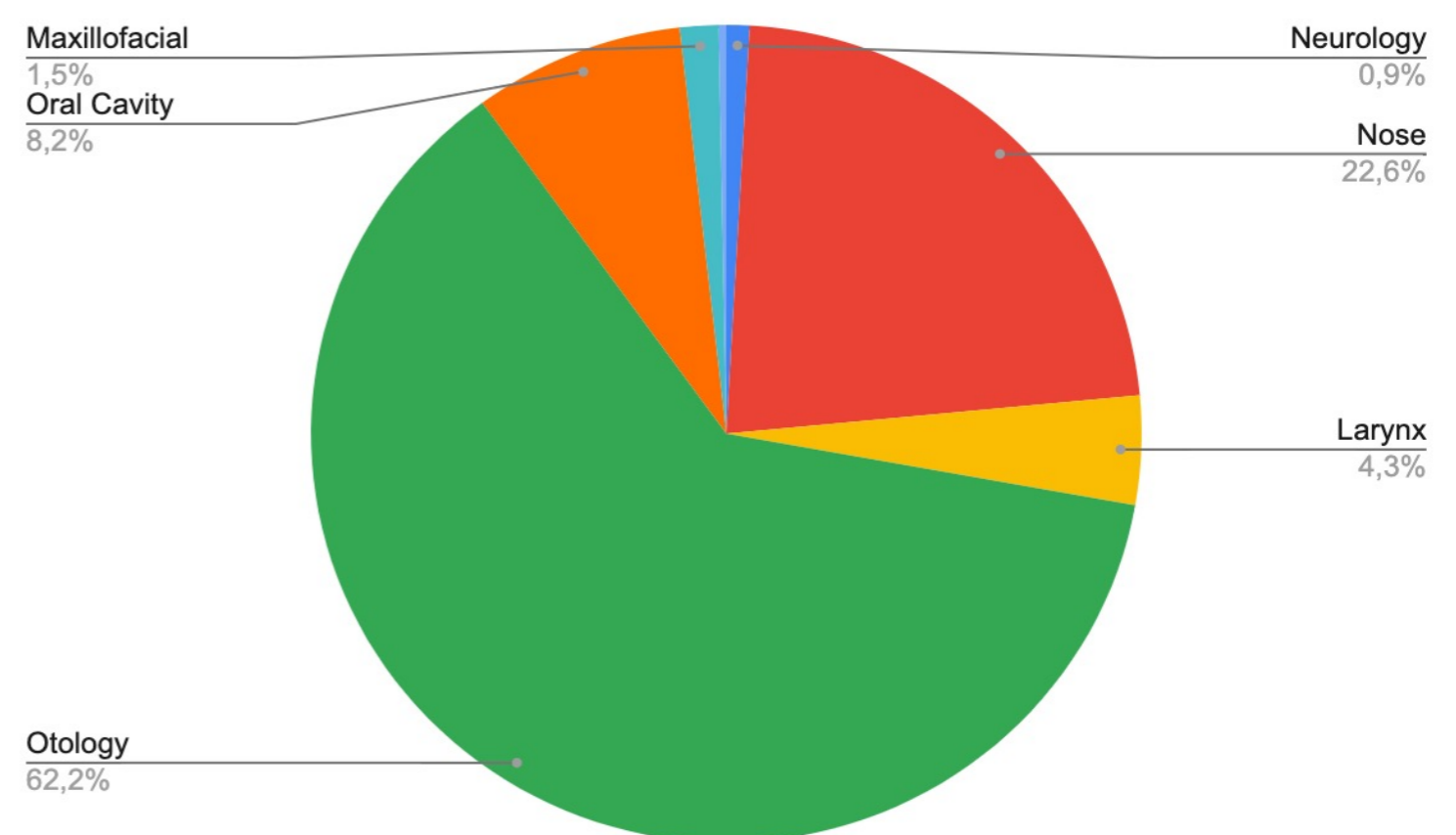
n= 328		
Variable	n	%
Gender		
Female	181	55.18
Male	147	44.81
Age	35.6	

Results

- 55.18% of the population were women (n=181), the ages were between 1 and 90 years with a mean of 35.8 years (SD 1.24).
- Abnormalities were found in 31.4% of otoscopies, 22.56% of rhinoscopies, and 8.53% of oral cavity explorations.
- The most common reason for consultation was the ear (62.2%), followed by the nose (22.6%) and the oral cavity (8.2%).
- The 328 patients evaluated, it was possible to provide an approach and management during the teleconsultation in 74.09% of the cases and 25.91% required referral to be evaluated face-to-face.

Discussion

- The most frequent diagnosis was hearing loss, this finding is probably due to the easy reading of audiological studies, as occurred in the Ryan R study. (3).



Graph 1. Distribution of the reasons for consultation by anatomical region.

- In the particular case of our program, there are some technological barriers in contrast to the studies and programs described internationally, when diagnosing pathologies referring such as the paranasal sinuses and the larynx .
- Regarding nose and ear pathologies, an easier approach is made taking into account that previous video-otoscopies and video-rhinoscopies were performed with photographs taken and sent to the remote examiner, (4). which can be contrasted with what was found in the studies by Patricoski et al and Kokesch et al .
- The 25.91% required face-to-face evaluation, a slightly altered value compared to the results described the literature where 16% are reported. (1), and that was a limitation in our study because if the patient requires or benefits from surgical management, this decision must be made after the a physical examination were performed by the surgeon who will carry out the procedure.

Conclusion

The telemedicine program in Otolaryngology of the Hospital de San José, facilitated the diagnosis and therapeutic approach in 74.09% of the population studied, With the ear being the most prevalent reason for consultation by anatomical region, thus increasing the possibility of providing an immediate solution to the reason for consultation during the assessment.

The proportion of referrals for face-to-face assessment with an otolaryngologist was 25.91%, higher than that found in the international literature.

The implementation of technological elements is suggested to improve the approach to sinus or laryngeal pathologies, and thus reduce the proportion of referrals to face-to-face assessment.

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