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Utility of Telemedicine for Diagnosis and Management of Laryngology-Related Complaints during COVID-19

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In order to minimize exposure during the COVID-19 pandemic, otolaryngologists transitioned many clinical encounters to telemedicine. Telemedicine has enabled otolaryngologists to maintain their clinical practices while protecting themselves and patients through social distancing. It was especially critical to implement telemedicine within laryngology clinics given the initial concern about potentially aerosol generating procedures such as laryngoscopy during the COVID-19 pandemic.

Previous studies have reported high satisfaction rates with telemedicine among patients and otolaryngologists. Telemedicine has been utilized in otolaryngology clinics by a diverse population, with no difference in demographics, insurance, and socioeconomic level between patients seen during the pandemic and patients seen during the same time period in previous years. While telemedicine is highly rated among patients and providers and enables diverse populations to have access to care, few studies have evaluated the accuracy of preliminary diagnoses or management provided during telemedicine in otolaryngology [1].

Diagnostic accuracy and efficacy of empiric therapy provided during telemedicine visits are of particular interest in order to determine the feasibility of telemedicine in effectively managing patients. High reliability and accuracy of diagnosis have been reported in patients with various otolaryngological complaints including otologic conditions, rhinosinusitis, peritonsillar abscess, and nasal fracture. In terms of management provided through telemedicine, one study found that telemedicine was associated with a lower rate of outpatient antibiotic treatment for acute rhinosinusitis compared with the previous year, and another study found that there is high sensitivity between otolaryngologists in the ability to determine which patients presenting with peritonsillar abscess would require prompt in-person evaluation.

While laryngoscopy can likely be safely delayed in the majority of patients, little is known about the utility of telemedicine for initial diagnosis and management of new patients presenting with laryngology-related complaints. In this study, we aim to investigate the concordance in diagnosis and management provided during the initial telemedicine visit and subsequent in-person visit with laryngoscopy at a tertiary care center laryngology clinic [2].

Demographic factors (age, gender, race, and preferred language) along with specific variables relating to their clinical encounters (chief complaints, provider seen, encounter duration, and days until in-person laryngoscopy from initial telemedicine visit) were recorded on an online REDCap (Research Electronic Data Capture) database. Study data were collected and managed using REDCap electronic data capture tools hosted at the University of Southern California. Chief complaints were categorized into 5 groups: 1) voice-related (i.e., hoarseness, voice loss, and voice changes), 2) swallowing-related (i.e., difficulty swallowing, food sticking, and regurgitation), 3) general throat complaints (i.e., throat pain, throat discomfort, throat clearing, postnasal drip, and globus sensation), 4) airway-related (i.e., breathing difficulties, subglottic/tracheal stenosis, and airway obstruction), and 5)

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others (i.e., tonsil stone, tonsillitis, drooling, bloody mucus, and hemoptysis) [3].

Preliminary management plans provided after telemedicine encounters were broad, ranging from behavioral/dietary modification, vocal hygiene, hydration, referral to Speech Language Pathologist (SLP) for voice therapy, reflux medications (i.e., H2-blockers, proton pump inhibitors, alginates), imaging (i.e., Modified Barium Swallow Study [MBSS], computed tomography [CT], magnetic resonance imaging [MRI], and ultrasound [US]), and future need for procedures (in-office botox injection, injection laryngoplasty, microlaryngeal surgery, etc.). Management was determined to be discordant if management changed or additional interventions were offered after the subsequent in-person visit with laryngoscopy.

Concordance in diagnosis and management were determined by two independent research personnel who did not provide care to the study cohort. Data were reviewed in detail in iteration if any discrepancy was noted between two reviewers until consensus was reached. Final outcomes were determined after a series of team discussions. Overall concordance rates were calculated separately for both diagnosis and management [4].

Telemedicine appointments were conducted using the USC Telecare Application. Prior to their appointment, patients were instructed to download the USC Telecare App on their preferred device and given a link to the USC Telecare Portal. They were also instructed to connect through the app at least 10 minutes before their appointment time to enter the virtual waiting room and complete their online check-in. After the patient had finished their check-in, their provider was able to begin the telemedicine appointment.

Once the telemedicine appointment was completed, the patient was scheduled for an in-person follow-up appointment. The timeframe for the in-person visit was determined by the treating clinician based on the urgency of the presumed diagnosis. Initially, patients were instructed to complete a COVID-19 test prior to their appointment to confirm their negative status. Once this was complete, the patient was allowed into the clinic for the in-person encounter and laryngoscope examination. All patients underwent a standardized COVID-19 symptom screening prior to entering the clinic building. After July 2020, COVID-19 negative status was no longer required for patients undergoing in-person examination and laryngoscopy [5].

References:

1. Morisada MV, Hwang J, Gill AS, Wilson MD, Strong EB, et al. (2021) Telemedicine, patient satisfaction, and chronic rhinosinusitis care in the era of COVID-19. Am J Rhinol Allergy 35:494–499.
2. Itamura K, Tang DM, Higgins TS, et al. (2020) Comparison of patient satisfaction between virtual visits during the COVID-19 pandemic and in-person visits pre-pandemic. Ann Otol Rhinol Laryngol 776.
3. Miller LE, Bhattacharyya N (2021) Antibiotic prescribing for acute rhinosinusitis: In-person versus virtual visits during Covid-19. Laryngoscope 131.
4. Strohl MP, Dwyer CD, Ma Y, Rosen CA, Schneider SL, et al. (2020) Implementation of telemedicine in a laryngology practice during the COVID-19 pandemic: Lessons learned, experiences shared. J Voice 36:396-402.
5. Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, et al. (2009) Research electronic data capture (REDCap)-A metadata-driven methodology and workflow process for providing translational research informatics support. J Biomed Inform 42:377-381.