CREATING A SYMPTOM AND SEVERITY INDEX FOR INDUCIBLE LARYNGEAL OBSTRUCTION

ASHA CE APPROVED PROVIDER

Pennsylvania Speech-Language-Hearing Association

Introductory Level

.05 ASHA CEUs

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Learning Objectives:

- State the definition and prevalence of Inducible Laryngeal Obstruction/ Exercise-Induced Laryngeal Obstruction
- Explain the strengths and weaknesses of current indexes assessing Inducible Laryngeal Obstruction/Exercise-Induced Laryngeal Obstruction
- Explain the diagnostic criteria and process of diagnosing Inducible Laryngeal Obstruction/Exercise-Induced Laryngeal Obstruction

Course Abstract

Inducible laryngeal obstruction or exercise-induced laryngeal obstruction (ILO/EILO) is a “complex upper airway disorder characterized by inappropriate, transient, reversible narrowing of the larynx in response to external triggers” such as acid reflux, allergies, and upper airway infections (Halvorsen, 2017, p.1). These triggers may cause symptoms including difficulty breathing, dyspnea, wheezing, chest tightness, dysphonia, or anxiety (Sayad, 2023). Many symptoms overlap with asthma (Traister et al., 2014); however, a key distinction is laryngeal hypersensitivity. Haines et al. (2024) found symptomatology was “linked by a unified laryngeal hypersensitivity with hyperresponsiveness” (p.4). The term ILO/EILO will be used to refer to this disorder (Christensen et al., 2015). Bronchodilators are often ineffective in treating asthma-like symptoms in ILO/EILO (Ludlow et al., 2023), which may lead to misdiagnosis (Crawford et al., 2022). No comprehensive checklist exists to help clinicians differentiate ILO from asthma. Cases have increased since the COVID-19 pandemic (El Kik, 2022), with studies suggesting a correlation (Abou-Elsaad, 2024). Exercise is also a known trigger, defined as “inappropriate vocal fold closure that occurs during exercise” (Liyanagedara et al., 2016). Diagnosis is confirmed via laryngoscopy (Sayad, 2023). Existing questionnaires such as the Dyspnea Index (Traister et al., 2014) and Vocal Cord Dysfunction Questionnaire (Fowler et al., 2015) are not comprehensive. The Voice Lab at Misericordia University developed the Inducible Laryngeal Obstruction Symptom and Severity Index (ILOSSI) by analyzing 60 de-identified charts. Using ChatGPT, researchers identified common symptoms including dyspnea, throat tightness, coughing, stridor, and voice changes. The ILOSSI includes three sets of five questions on voice, breathing, and cough, each rated for frequency and severity, providing a clinical tool for clinicians to aid in diagnosis and treatment.

Speaker Bios

Cari Tellis, Ph.D., CCC-SLP, a professor in the Speech-Language Pathology Department at Misericordia University, has presented at state, national, and international conferences. Dr. Tellis has received grants for research in voice science and has published in peer-reviewed journals. She is an editorial reviewer for scholarly publications within her discipline.

Alexandra Long is a graduate student at Misericordia University. She has participated in research studies involving voice and presented at the state, national, and international level.

Olivia Lidle is a student at Misericordia University. She has participated in research studies involving voice.

Speaker Disclosure

Cari Tellis, Ph.D. is a Full, Tenured Professor in the Speech-Language Pathology Department at Misericordia University.

Alexandra Long is a paid research assistants in the Speech-Language Pathology Department at Misericordia University.

Olivia Lidle is a paid research assistants in the Speech-Language Pathology Department at Misericordia University.