

NEW ASPECTS OF DIAGNOSIS AND TREATMENT OF DYSPHONIA

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Abstract. The article discusses the main aspects of diagnosis and treatment of dysphonia at the present stage and provides modern clinical guidelines. There is a vast array of pathological processes that can cause dysphonia. Of particular concern in this context are neoplastic processes and neoplasms, as delays in their diagnosis lead to higher mortality rates. If dysphonia persists for more than 4 weeks, laryngoscopy is mandatory to rule out serious laryngeal diseases. People in voice-intensive professions are most susceptible to dysphonia. It is important to identify risk factors in patients, which include recent surgeries in the head, neck, and chest area, recent endotracheal intubation, the presence of neck lesions, voice and speech professions, a history of smoking, and signs of respiratory failure. Treatment for dysphonia depends on the cause of the pathological process and may include management of the underlying disease, pharmacotherapy, non-drug treatment, and surgical intervention. Among the medications of allopathic medicine, there are very few drugs that specifically improve the quality of voice function. In this regard, homeopathic medicines play a significant role in the treatment of voice disorders, as they have demonstrated efficacy in clinical studies and have a wide range of indications with minimal side effects. However, the use of traditional homeopathic remedies is limited by the need for specialized knowledge in homeopathy. To optimize the treatment of these patients, complex homeopathic medicines have been developed, which can be used in combination with conventional treatment by specialists without specific knowledge in homeopathy.

Keywords: dysphonia, homeopathy, clinical homeopathy, hoarseness, phoniatriy, voice, laryngology

Introduction.

Dysphonia is a term that refers to a qualitative impairment of vocal function, manifested by hoarseness, nasality, weakness, and rapid fatigue of the voice; patients may also experience paresthesia and pain in the larynx, pharynx, and neck. Since the same symptoms can occur in patients with a common cold as well as in those with serious laryngeal pathology, all voice disorders should be evaluated by an otolaryngologist or phoniatriist. Treatment of such patients should be carried out by a specialist, taking into account the specific condition of the vocal apparatus in each clinical case.

Prevalence of Dysphonia.

According to the 2018 guidelines of the American Academy of Otolaryngology – Head and Neck Surgery, dysphonia is a prevalent clinical condition affecting one-third of the global population at some point in life. The guidelines define dysphonia as a physician-diagnosed voice production disorder. While anyone can develop dysphonia, individuals in voice-intensive professions and the elderly are particularly susceptible [1,2]. The annual incidence of voice disorders among adults is approximately 1 in 13. Unfortunately, there is a lack of comprehensive data on the prevalence and treatment methods of voice disorders in domestic literature. The increasing demand for vocal performance in various professions due to enhanced communication requirements has led to a rise in voice-related pathologies [3-5]. For example, over the past 50 years of the 20th century, the incidence of voice disorders among teachers doubled [6,7]. A large cross-sectional study in 2001 reported a dysphonia prevalence of 0.98% (536,943 dysphonia cases per 55 million people). The condition was more common in women (1.2% compared to 0.7% in men) and individuals over 70 years old (2.5% compared to 0.6–1.8% in other age groups) [8]. It has been established that individuals in professions requiring significant vocal strain are 1.4 times more likely to develop dysphonia than the general population [1]. Despite the high prevalence of voice disorders, only a small proportion of patients seek medical attention, yet economic losses due to disability can be significant.

Dysphonia is usually caused by benign or self-limiting conditions, but in some cases, it can indicate a more serious condition requiring timely diagnosis [9-12]. Dysphonia significantly reduces the quality of life for patients, often leading to social isolation, depression, anxiety, missed workdays, and lifestyle changes [1,13]. A meta-analysis of studies has shown that non-neoplastic voice disorders have a comparable impact on quality of life as conditions such as bronchial asthma, acute coronary syndrome, depression, and chronic obstructive pulmonary disease [14].

Causes of Dysphonia.

There are many pathological processes that manifest as dysphonia. From a diagnostic perspective, particular attention should be paid to dysphonia associated with neoplastic processes in the head and neck region. In this group of patients, failure to properly assess the larynx can lead to delayed diagnosis, resulting in the detection of disease at later stages that require invasive treatment and have lower survival rates. Other causes of voice disorders may include neurological conditions (vocal fold paralysis, spasmodic dysphonia, essential tremor, Parkinson's disease, amyotrophic lateral sclerosis, multiple sclerosis), gastrointestinal disorders (GERD, eosinophilic esophagitis), rheumatologic diseases (Sjogren's syndrome, sarcoidosis, amyloidosis, Wegener's granulomatosis, rheumatoid arthritis), allergic conditions, pulmonary diseases (e.g., COPD), musculoskeletal issues (muscle tension dysphonia, fibromyalgia, cervicgia), functional disorders, traumatic (including iatrogenic)

factors, and infections [1,15]. Dysphonia may also be a side effect of various medications such as anticholinergics, inhaled corticosteroids, decongestants, and antihypertensives [1,2,13].

Diagnosis.

The importance of identifying the cause of dysphonia in patients presenting with voice deterioration, pitch and volume changes, or hoarseness is unquestionable. Adults can describe changes in their voice characteristics, while in young children, dysphonia is identified by alterations in crying sounds. A thorough medical history should be taken, including the onset and nature of dysphonia (sudden or gradual), potential triggering events, the impact on quality of life, associated symptoms (swallowing difficulties, respiratory distress), current medications, harmful habits (smoking, alcohol consumption), comorbid conditions, and previous surgeries. Identifying risk factors in such patients is critical. Risk factors include recent head, neck, or chest surgeries, recent endotracheal intubation, the presence of a neck mass, a voice-dependent profession, smoking history, and signs of respiratory failure [1].

During examination, the physician must assess voice quality and breathing patterns. Dysphonia is an indication for laryngoscopy and visualization of the larynx, as this symptom can be a sign of serious conditions where a delayed diagnosis is unacceptable. A standard otolaryngological examination should be supplemented with instrumental evaluations of the larynx, such as fiberoptic endoscopy, stroboscopy, and other diagnostic methods as indicated. Laryngoscopy allows for the assessment of laryngeal mucosa, vocal fold mobility and closure, and the involvement of vestibular folds in phonation [1].

Treatment of Dysphonia.

The treatment of dysphonia depends on the underlying pathological process and may include addressing the primary disease, pharmacotherapy, non-drug interventions, and surgical treatment.

Non-Drug Treatments. The main non-drug treatment methods for voice disorders include phonotherapy and surgery. According to dysphonia treatment guidelines, phonotherapy is effective for muscle tension dysphonia, Parkinson's disease-associated dysphonia, hypotonic dysphonia, presbyphonia, unilateral vocal fold paralysis, vocal process granuloma, and may be used in combination with pharmacological (e.g., botulinum toxin for spasmodic dysphonia) or surgical (e.g., post-medialization surgery) interventions. Surgical treatment is recommended for patients with suspected malignancies, benign laryngeal tumors unresponsive to conservative therapy, or hypotonic dysphonia. Functional microlaryngoscopic procedures are commonly performed in such cases [1,15].

Pharmacotherapy. For conservative treatment, antibiotics, anti-reflux medications, and corticosteroids should not be prescribed without performing

laryngoscopy, which is the prerogative of the otolaryngologist [1,13]. Depending on the cause, pharmacotherapy may include systemic and topical corticosteroids, antihistamines, mucolytics, systemic and topical antibiotics, among others. However, many of these medications have side effects that limit their long-term use in routine practice [1,13].

Homeopathy in Dysphonia Treatment. Homeopathic preparations play an important role in dysphonia treatment. Clinical studies have demonstrated their efficacy, with a wide range of indications and minimal side effects [16]. However, traditional homeopathic remedies require specialized knowledge. To optimize treatment, complex homeopathic preparations have been developed that can be used in combination with traditional treatments by specialists without expertise in homeopathy. The only officially registered homeopathic medication for voice disorders is Homeovox, produced by Boiron, France. It is indicated for laryngitis of any etiology, hoarseness, and voice loss. Homeovox has anti-inflammatory and mucolytic properties and improves voice quality from the first day of therapy, accelerating recovery and restoring vocal function by day seven [17].

Conclusion

Thus, the use of complex homeopathic preparations for treating dysphonia of various origins is effective and safe from an evidence-based medicine perspective. Considering the above, Homeovox can be recommended for widespread clinical use, particularly among professionals who rely on their voices.

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