

CASE REPORT

Multiple vocal fold lesions in a single patient

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Abstract

We report the case of a 48-year-old woman, a teacher, with recurrent severe dysphonia and multiple and different lesions at the same time in her vocal folds. The evolution of the lesions and the possible mechanism by which they have been associated in the same patient are commented.

KEYWORDS

sulcus vocalis, vocal cyst, vocal nodule, vocal polyp

Voice disorders and vocal lesions are very prevalent among teachers, and consequences can be serious.¹⁻³ are the vocal nodules and many times is possible to observe other simultaneous organic lesions.

We report the case of a 48-year-old woman, a teacher, with recurrent severe dysphonia. She had a history of voice problems over 8 years, but reported troubles with her voice from childhood. Her voice, which sounded strained, breathy, and hoarse, had restricted range and exhibited pitch breaks.

Laryngoscopic examination (Figure 1) revealed, in the left vocal fold, a cyst (1) located near the surface and a polyp (2) and, in the right fold, a reactive lesion (3). Both folds had a "sulcus vocalis" (arrows). We consider that these lesions may have arisen from "heavy" use of the voice, becoming traumatic as a consequence of malformation, the sulci, of the vocal folds.

Benign vocal cord lesions resulting from voice misuse or abuse are common and are also relatively common to observe more than one in the same patient; it is, however, extremely rare to observe these four different lesions in the same patient or more than one in the same focal fold.

Acoustic and aerodynamic voice analysis is systematically performed on patients before and after treatment. An assessment is also carried out by the speech therapist.

In order to improve the patient's voice and to prevent more damage on the vocal folds, surgical treatment was proposed. The surgical procedure was performed in one-stage surgery with cold technique.

A review was carried out after two months. The patient's voice was markedly improved after phonosurgery. The acoustic parameters improved significantly. The aerodynamic parameters had improved but not completely and speech therapy was proposed, which she carried out for 3 months. Guidelines to avoid vocal trauma were also indicated.

After 9 months, all aspects improved remarkably.

Sulcus vocalis is a congenital lesion that causes poor voice quality in many cases. It is frequently associated with other lesions such as vergetures, cysts, or mucosal bridges. It is possible that in this patient the presence of these lesions entailed greater trauma to the vocal cords and generated other lesions more related to mechanical

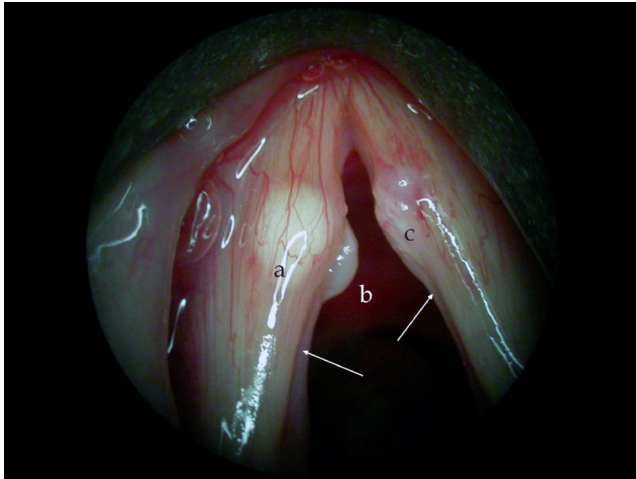


FIGURE 1 Laryngoscopic examination: left vocal fold, a cyst (a) located near the surface and a polyp (b) and, in the right fold, a reactive lesion (c). Both folds had a “sulcus vocalis” (arrows)

trauma such as the polyp and the reactive lesion that histologically was described as a nodule with dyskeratosis.

Speech therapy and guidelines are very important to improve the altered phonatory pattern and prevent recurrence.

As part of the specific training of teachers, a correct phonatory technique should be sought, as well as advice to take care of the voice and the vocal cords.

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CONFLICT OF INTEREST

The authors declared no potential conflict of interest with respect to the research, authorship, and/or publication of this article.

AUTHOR CONTRIBUTIONS

Secundino Fernandez contributed to diagnosis and treatment, and submitted the manuscript. Sol Ferran

submitted the manuscript. Octavio Garaycochea submitted the manuscript.

ETHICAL APPROVAL

No ethical objections were observed by the Ethics Committee of the University of Navarra.

CONSENT

The authors confirm that the consent has been signed and collected as it has been certified by de Ethical Committee of the Hospital Clinica Universidad de Navarra (File 3y File 4).


DATA AVAILABILITY STATEMENT

Data sharing not applicable – no new data generated.

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