

CASE REPORT: PSYCHOGENIC DYSPHONIA

Estudo de caso: disfonia psicogênica

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ABSTRACT

Psychogenic functional dysphonia is related to psychological aspects. The type of voice, the articulation and the fluency are sensitive to psychological changes. Voice adjusted with falsetto, is a voice with an extremely high pitch and can be observed in cases of psychogenic dysphonia. A differential diagnosis for psychogenic dysphonia is essential to perform an adequate and effective treatment. Prognostic of a psychogenic dysphonia is generally good. It commonly affects women. The aim of this study is to present the therapy evolution of an individual with psychogenic dysphonia. AJO, 45 years, male, attended to the ambulatory of Voice Evaluation and Therapy as an otorhinolaryngologist indication. His complaint was "my voice is perfect in the morning but it gets acute through the day". At April 18, 2013 he received the medical diagnosis of "reduced mobility of left vocal fold". Treatment based on trigger sound techniques, with direct modification of the symptoms, quickly evolved and had great satisfaction from the patient. When there is a psychogenic dysphonia suspicion, organic changes must be discarded. It is essential to have an evaluation that helps to differentiate diagnosis and therapeutic techniques which encourage the patient.

KEYWORDS: Voice; Health Evaluation; Rehabilitation; Clinical Evolution

■ INTRODUCTION

Psychogenic dysphonia is classified as a functional dysphonia due to its absence on presenting changes on the vocal folds structure ^{1,2}. Voice quality, speech articulation and fluency are sensible to psychological symptoms ³, therefore, stress situations may be related to vocal changes.

A falsetto quality voice, characterized as an extremely high pitch voice, can be observed in psychogenic dysphonia cases and may be easily misdiagnosed as vocal fold paralysis⁴.

Psychogenic dysphonia diagnosis is given by the absence of organic changes in the larynx examination combined with vocal quality changes that do not occur in activities not related to speech, such as coughing. However, the diagnosis does not rule out muscle tension that may contribute to the dysphonia ^{5,6}.

In any case of psychogenic dysphonia, the differential diagnosis is essential since it will define

the appropriate and most effective treatment for each patient. In addition, it is of great importance to exclude any organic disease. To perform a complete evaluation, therapeutic protocols and tests are needed. One should also consider the patient history, psychological history and its relation to the vocal problem ⁷⁻⁹.

The literature indicates a good prognosis for psychogenic dysphonia and an excellent result in only a few speech language pathologist therapeutic sessions^{7,9,10}.

Psychogenic dysphonia is more common in females than in males^{5-7,9} in a ratio of 8 women to 1 man.

The aim of this study is to present the therapeutic outcome of a case with medical report of decreased mobility of the vocal fold, initially treated as an organic disease, that later showed a consistent story with psychogenic dysphonia, with rapid therapeutic evolution and recovery of vocal quality in two therapy sessions.

■ CASE REPORT

This study was approved by the Ethics Committee and Research under the number 304.661/2013.

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Conflict of interest: non-existent

A.J.O, 45 years old, male, credit analyst, unemployed at the moment of the interview (18/April/2013), married, living in São Paulo, Brazil, attended to vocal Evaluation and Therapy, indicated by an otolaryngologist (ENT) with diagnosis of “mobility reduction of the left vocal fold, and supra-glottic constriction. Switches normal voice with falsetto voice during the exam” (28/March/2013) and vocal complaint of: “my voice is perfect in the morning but it gets acute through the day”.

The patient’s voice was recorded on audio and video on two occasions (first and third session). The patient presented two previous medical reports, from different services, which confirmed an organic nature of the disorder, although it was inconsistency with the speech language pathologist evaluation.

A.J.O oldest medical report was from a private service and the finding was a left vocal fold paralysis (2/Jan/2013). Another exam from 27/fev/2013 was an electromyography that noted a “neuropathy of the left recurrent laryngeal nerve, with signs of active denervation and no signs of reinnervation evolution.”

The patient reported the dysphonia onset on 15/Nov/2012 while at work. He related his voice disorder with the air conditioner that was being fixed at that day. He reported coughing and then, suddenly, his voice presented a high pitch quality. With his new vocal pitch and intermittent voice sound, he lost his job. His job involved talking on the phone with clients, and with his new voice setting he lost credibility with his customers and boss. After searching for medical help, he received a left vocal fold paralysis diagnosis. He was not attending to speech language pathologist therapy and for personal reasons abandoned medical care. A.J.O began searching for layman sources such as Internet exercises, in order to improve his vocal quality; however, he was not successful. Later on, he came to this service for medical orientation and received the diagnosis first pointed out, of reduced mobility of left vocal fold, and began speech language pathology therapy.

In the vocal assessment, it was observed a slightly breathy vocal quality, moderately unstable and tense with a laryngopharyngeal resonance and a high pitch voice. He presented a good speech articulation, pneumophonoarticulatory incoordination and reported pain during phonation. He showed maximum phonation duration lower than expected such as: / a /: 14.9 sec; / i /: 14.6 sec; / u /: 16.9 sec; / s /: 14.4 sec; / z /: 18.5 sec; with s / z ratio of 0.77, suggesting glottal hyperconstriction. Moreover, it was noticed that the patient maintained a normal sounding voice in activities not directly related to speech, such as coughing and throat clearing.

A therapy with direct modification of the vocal symptoms was chosen as procedure.

The study did not undergo statistical analysis, because it is a case report. Thus, the data were analyzed and described.

■ RESULTS

After detailing the patient history regarding the vocal symptoms, vocal assessment and therapeutic tests, it was concluded a psychogenic dysphonia diagnosis. The patient was treated with trigger sound techniques, with direct modification of the symptoms.

It was used humming technics followed by speech, laryngeal manipulation and vocal fry emission. The patient presented a lower pitch voice that was associated with increased tension and a low level of pain. At home, the patient reported performing these exercises every day, three times a day. In the next session of vocal therapy, the patient showed a lower pitch voice with reduced tension and absence of the high pitch voice earlier observe. At this session, it was performed the wild chewing exercise followed by vowel emission. In the third and final vocal therapy session, A.J.O speech showed stabilization in all vocal parameters set in vocal therapy, he seemed satisfied with his vocal quality, saying he had recovered the voice he loves. The patient felt confident to retake a class he had stopped due to the shame he had of his voice, and was very confident that he would find a new job.

■ DISCUSSION

This case reports an individual with psychogenic dysphonia diagnosed by clinical assessments, with a sudden onset and loss of voice. Also reporting the exact date of the beginning of the symptoms and normal laryngeal sounds¹ not related to speech, such as coughing and throat clearing.

The literature emphasizes that patients with psychogenic dysphonia may have reduced vocal fold adduction while under the laryngoscope examination⁶, plus they were elongated, which sets the high pitch and breathy voice observed on the patient¹.

A direct intervention on the symptoms provides a fast vocal response^{11,12} and avoids fixing negative adjustments⁶. The patient was more motivated when he observed the positive vocal changes and therefore, stayed committed to the therapeutic process. It is noteworthy that the patient delayed his search for proper treatment, which is quite common in individuals with functional dysphonia^{6,13}.

Therefore, it was essential to provide good results for an efficient therapeutic evolution.

With a positive and fast evolution, it could be noticed that the exercises were all efficient for this case, which also confirms what is commonly found in the literature regarding the fast evolution in psychogenic cases when correctly diagnosed^{1,6,7,9}.

Due to the medical report of the electromyography exam, that is an objective examination of the neuromuscular activity¹⁴, a search for papers was done to try to correlate the initial hypothesis or justify the conflict between the findings of both objective exams (laryngoscopy and electromyography) and the vocal evaluation. Initially, the aim was to correlate the vocal fold paralysis with a bacterial etiology, once the first doctor, from a different service, told the patient he had the vocal paralysis due to a bacterium in the air conditioner. No studies were found. In the other hand, the literature describes that vocal paralysis may be temporary^{11,14,15}. One study¹¹ reported a vocal fold paralysis case associated with psychogenic dysphonia in which the treatment for the paralysis was prioritized and only later the psychogenic aspects were considered. The present study hypothesis that the patient may had had a vocal fold paralysis, with an unknown etiology, and due to that, developed a high pitch vocal adjustment, which was maintained after the return of the vocal fold movement. Therefore, the patient presented a psychogenic functional paralysis with good and fast prognosis.

Psychogenic dysphonia results from a chronic or acute psychosocial stress⁶. Considering A.J.O history, his event does not fit into an acute episode because there is no stress event reported at the exact date of the dysphonia onset. Therefore, it can be assumed that the patient suffered from a chronic event. A.J.O referred a stressful work environment, having already been threatened with a firearm while attending a client. After this event, he was transferred to a different area of the company, telemarketing, but also referred being threatened by the phone. This leads to the belief that his vocal change was a result of his interaction in the work environment in a long-term basis. It is noteworthy, that by the time the patient began treatment at this service, he was not at the same work as when the symptoms began.

This may have also contributed for his fast evolution on vocal therapy.

Another hypothesis is that the patient stayed a short period of time under this institution service; therefore, there was not enough time to gain trust with the professionals to share private issues⁵.

If only the medical report was considered, the vocal exercises proposed would had been specific for vocal fold paralysis with the objective to close the glottis. The exercises previously reported, such as humming technics followed by speech, laryngeal manipulation with vocal fry emission, would not have been prioritized and, perhaps, no immediately effect on the vocal symptoms would be observed.

It was not possible to follow the patient evolution in partnership with the ENT, neither to discuss the first diagnosis of bacterial etiological hypothesis because both professionals were from different institutions with difficult access. All the data was obtain by the vocal history from the patient and the exam results, what might have been a bias since it was not possible to define the etiology of the vocal fold paralysis and, in fact, if it existed.

This study shows, among other things, the importance of giving importance to the patient complaint, history and reports, in addition to other professional examinations and never to ignore any findings or the low prevalence of psychogenic dysphonia in males, to influence negatively the diagnosis and, therefore, the prognosis of the case. It is of great importance to consider the speech language pathologist evaluation for the correct conduction of the case so that it will be beneficial to the patient.

■ CONCLUSION

In cases of psychogenic dysphonia suspicion, it should be discarded any organic changes, preformed exercises that shows vocal skills and gain results within a few sessions. It is not uncommon the presence of a medical diagnosis that suggest the presence of organic etiology, therefore, a speech language pathologist evaluation that adds to the differential diagnosis is essential, as it is also essential, therapeutic techniques which encourage the patient.

RESUMO

Disfonia funcional psicogênica possui relação com aspectos psicológicos. O tipo de voz, a articulação e a fluência são sensíveis às oscilações psicológicas. Uma voz em ajuste de falsete paralítico, caracterizada como uma voz de *pitch* extremamente agudo pode ser encontrada em casos de disfonias psicogênicas. Em qualquer quadro psicogênico é essencial um diagnóstico diferencial, a fim de viabilizar um tratamento fonoaudiológico e médico adequados e efetivos. O prognóstico de uma alteração psicogênica geralmente é bom. O quadro de disfonia psicogênica é mais comum no sexo feminino. O objetivo desse estudo é apresentar a evolução terapêutica de um indivíduo com disfonia psicogênica. A.J.O., 45 anos, sexo masculino, compareceu ao Ambulatório de Avaliação e Terapia de Voz encaminhado por médico otorrinolaringologista. Trouxe a queixa vocal “pela manhã a voz está perfeita, conforme o dia passa, a voz fica fina”. Realizou avaliação fonoaudiológica em 18 de abril de 2013, com laudo médico de “mobilidade reduzida de prega vocal esquerda”. Tratamento com técnica de sons disparadores, com modificação direta nos sintomas e evolução rápida. Demonstrou-se satisfeito com sua qualidade vocal. Em casos de suspeita de disfonias psicogênicas de conversão, devem-se descartar alterações orgânicas, sendo essencial uma avaliação fonoaudiológica que auxilie no diagnóstico diferencial e provas terapêuticas que incentivem o paciente.

DESCRITORES: Voz; Avaliação em Saúde; Reabilitação; Evolução Clínica

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