

## SPASTIC DYSPHONIA: AN INTRODUCTION AND A CASE REPORT

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In 1871 Traube described Spastic Dysphonia as a form of psychogenic hoarseness (Aronson *et al.*, 1968 a). Luchsinger (1967) defines it as 'a disorder of phonation characterized by a strained, creaking, choked vocal attack and a tense and squeezed voice accompanied by extreme tension of the entire phonatory system. The stressed vowels are divided into two portions. It is characteristic that the communicative function of speech is primarily affected' (p. 328). The reflex action of phonation remains intact. The patient may not exhibit any trouble in laughing, coughing, singing, speaking to oneself or speaking to children. During silence, respiration is normal, becoming completely erratic with double starts with violent jerks and wasteful breathing while speaking (Panconcelli-Calzia 1956). Upper respiratory tract and larynx, on examination, appear normal. However, continued vocal strain may lead to secondary signs of tissue irritation in the larynx (Brodnitz 1961).

There appears to be little agreement on the aetiology of spastic dysphonia. Many believe it to be purely psychogenic in origin (Luchsinger 1967). On the other hand, some claim it to be associated with signs of central nervous system disease. Arnold (1959) however, has warned against confusing spastic dysphonia with disease of the central nervous system and other psychogenic dysphonias. Aronson *et al.*, (1968b) have specified many similarities between the two groups and certain voice and articulation features to differentiate between them.

Management of a case with spastic dysphonia has been said to lie outside the domain of an average speech therapist (Luchsinger 1967). However, it is felt that every patient with such a problem can be helped by a speech pathologist. A variety of therapeutic procedures such as psychiatric treatment, physiotherapy, suggestion, phoniatric rehabilitation (Luchsinger 1967), hypnosis, narcotherapy (Brodnitz 1961) have been tried with such cases. Prognosis, most authors maintain, is generally poor.

The following is a case seen in the All India Institute of Speech and Hearing who exhibited most of the symptoms generally associated with spastic dysphonia. The therapeutic procedures used to reinstate the normal voice having met with encouraging results, are described below with the case history.

S, a lady typist, 29 years, married, with two daughters, reported at the clinic in October 1969 with a feeble, intermittent and jerky voice.

She reported the problem was of three years duration, its onset being related to an incident that took place in her in-laws' house where she had been living ever

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since her marriage four years ago. She had always found the atmosphere there rather stifling. Her husband appeared to be a serious and stern person, and she was terrified of her in-laws, her mother-in-law in particular. She reports having been very cautious as to what and how she said. In spite of this caution, during her first pregnancy, a remark she made lightheartedly, is said to have been taken very seriously by her sister-in-law. The case grew increasingly anxious about the consequences when her mother-in-law would return home. As she had fearfully anticipated, she had to bear the brunt of the blame. S was very much distressed and shocked. Following this incident she reports having been aphonic for a week. Indian medicines were given and she gradually regained her voice (the recovery may or may not be due to the medicine) but it was no longer normal. However she reports that when she is happy or alone her normal voice returns for brief periods and when she is upset her voice gets worse. The patient does not live with her in-laws any more, and her new environment is said to be more congenial.

A diagnostic speech evaluation disclosed a moderated degree of spastic dysphonia accompanied by tension of the entire phonatory system. Her voice was found to be feeble, intermittent, with jerky explosiveness of vowels and had a strained hoarseness. A normal laugh and cough were noticed. Respiration was normal during silence and erratic during speech. No deviation in articulation was observed. Medical and laryngological examinations excluded organic pathology.

Since no organic pathology was detected and as most of the authorities agree that spastic dysphonia is a functional disorder, behaviour therapy was tried with this case in view of its success with other functional problems. A combination of different techniques of behaviour therapy was applied. The goals to be attained were: (1) To locate a normal voice by modelling; (2) to achieve discrimination between the desired and the undesired voice through perceptive training; (3) to increase the frequency of occurrence of the desired voice by (a) verbal reinforcement of the desired voice (b) and penalizing undesirable voice by stopping phonation and/or communication; (4) stabilizing the desired voice by verbal reinforcement.

In the initial sessions, mechanism involved in the production of voice and the factors responsible for her problem were explained to the patient and she was also given some information as to the nature of her voice disorder. The further course of therapy was explained to her.

The patient was later instructed to model a low vowel produced by the clinician, the clinician in turn imitated the patient's jerky voice whenever it was produced by the case, pointed out the mistake and indicated her disapproval. This facilitated patient to discriminate between the normal and the undesirable voice and to correct herself. A normal voice was obtained by this method and it was noticed that so long as the voice remained normal erratic breathing and tension in the muscles of the neck ceased to exist. Verbal reinforcement was given to the production of normal voice, for lack of exaggerated muscle tension

and for normal breathing. The duration of normal phonation progressively increased.

Following the above mentioned procedures, five therapy sessions of 45 minutes each were given at the end of which she was able to say a few single words using the desired voice. She will be slowly introduced to sentences after which desensitization will be used to facilitate the generalization of the new response to extra-clinic situations. The preliminary observations are encouraging.

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