The Role of Psychological Factors in Muscle Tension Dysphonia

Sheri L. Goldstrohm, Ph.D.
University of Pittsburgh Medial Center

Background

To speak, one requires an organic apparatus capable of producing sound, a psychological intent to communicate, and a social context in which one feels the desire to talk.

Voice production rests on the outcome of the interaction of factors that can be conceptualized as being at organic, psychological, and social levels.

Background

An individual’s voice is a sensitive indicator of emotions, attitudes, and role assumptions.

As a result, impairments of voice function are not uncommon accompaniments of psychological conflicts.

Multidisciplinary Approach to Treatment

Evaluating of the patient with a voice disorder is best seen as a multidisciplinary endeavor.

The multidisciplinary approach provides the advantage of allowing clinicians from a variety of disciplines to cooperate in the assessment, bringing different areas of expertise and perspective to the task, while they dilute each others’ reductive clinical biases.
Indications for Referral for Psychological Consultation

- In cases where negative prognostic factors are identified, voice therapy may need to be augmented with psychotherapy.
- During a voice evaluation or treatment program, several factors may indicate that psychological consultation or intervention is necessary to improve prognosis for voice therapy.

Indications for Referral for Psychological Consultation

- During an initial evaluation:
  - Evidence of a psychiatric disorder
  - Predisposing personality factors: narcissistic preoccupation with voice or perfect performance, inhibition of expression of assertiveness or overt anger, inability to permit vocal crying, hypochondriacal traits, or a tendency to somatize psychological conflicts
  - Coincidence of psychological stressors or “event” and onset of dysphonia, when the conflict is not clearly resolved
  - Psychological distress concomitant with physical illness that commonly affects the voice (e.g., flu)
  - Patient consistently experiences anticipatory anxiety about voice production

Preparation of the Patient for Psychiatric Referral

- It is important to prepare the patient carefully for the referral.
- The psychologist can be portrayed as a colleague interested in voice disorders and who is more skilled in evaluating whether or not psychological factors are contributing to the voice disorder.
- When appropriate, the patient can be assured that he/she is not seen as having a definitive psychiatric disorder.
- It is worthwhile to explain to the patient the role of precipitating psychological factors, muscle tension, and anticipatory anxiety in the production of dysphonia.
- The interaction and additive effects of organic and psychological factors also should be reviewed as a part of the preparation.
Psychological Evaluation

- The role of the psychologist should be immediately made clear.
- The psychologist is an individual with particular interests in, and expertise about, psychological factors that may cause issues with the voice or those that arise in consequence of having a poor voice.
- It helps in establishing rapport if the psychologist is not viewed as someone looking for signs of “insanity”.

Psychological Evaluation

- Review of the history is undertaken with particular emphasis on the patient’s **life situation** at the start of each episode of the voice symptoms.
- Close observation is made of any **changes** in the patient’s voice related to specific topics especially those of emotionally charged situations or significant relationships.

Psychological Evaluation

- It is worthwhile pursuing any **events** that have impinged on the neck area, such as a thyroidectomy, being choked in a fight, or a whiplash injury sustained in a car accident.
- A patient often will say that his or her neck has long been a **vulnerable** area.

Psychological Evaluation

- It is also useful to determine how the patient experiences **stress**.
- Voice patients commonly report headaches, shoulder tension, or breathing difficulties.
Psychological Evaluation

- The usual psychiatric history is obtained with emphasis on how the expression of emotionally charged ideas were accepted in the family of origin and in adult life, at work, or in the family of procreation.

Psychological Evaluation

- The determination of a patient’s self-percept is also important.
- Does the patient perceive himself or herself to be:
  - Passive, unsuccessful, and mild mannered; OR
  - Domineering, declarative and loudly successful, with no idea of how a voice problems could possible have arisen
- Individuals falling into the latter group are unlikely to accept the operation of psychological factors in their voice disorders.

Psychological Evaluation

- It is important to note the patient’s affective responses, especially those of anxiety, anger, and sadness, whether covert or overt.
- These emotions, if not expressed freely without conflict, are particularly likely to have an impact on phonation.

Psychological Evaluation

- Having completed the full psychiatric examination, it is often useful to examine the patient for evidence of physical tension.
- It is uncommon for the intrinsic muscles of phonation to be misused without having a concomitant inappropriate level of tension in the auxiliary muscles of the head, neck, chest, and abdomen.
Psychological Evaluation

- It is also useful to observe patients’ respiration, particularly a tendency to increase intra-abdominal pressure in order to force air through constricted vocal folds.

- Drawing patients’ attention to tightness of the abdominal wall, spasm of the pelvic floor, and rigidity of the chest gives them a much better idea of why they produce peculiar vocal sounds, especially when they are emotionally aroused but not willing to express their feelings fully.

Our Patients

- Joint Relationship
  - We have been working together since 2008
  - This consisted of:
    - Consultation
    - Teaching
    - Seeing patients
      - The first patient started in February of 2008

---

Our Patients

- Case Load: 8 – 10 at any given time
- Gender: 2:1
- Age Range = 12 – 72 years old
Our Patients

- Length of treatment: Overall
  - Range: 1 – 62 sessions
  - Mean: 10.3 sessions

- Length of treatment: Closed
  - Range: 2– 18 sessions
  - Mean: 8.3 sessions

Our Patients

- Anxiety
  - Generalized Anxiety Disorder
  - Anxiety Disorder, NOS
  - Panic Disorder
  - Social Phobia
- Depression
  - Major Depressive Disorder
  - Dysthymic Disorder
- Adjustment Disorder
  - With Anxiety
  - With Anxiety/Depression
- Post Traumatic Stress Disorder

Our Patients

- Psychotropic Medications
  - Prior to treatment
  - During / following treatment

- Previous Psychiatric Care
  - Approximately 1/5 received some type of therapy previously
  - Half of the 1/5 received the services for bereavement or marital purposes

Our Patients

- Treatment varies

- Treatment is patient specific