### **Puberphonia**

### Dr. Anagha A. Joshi

## What is puberphonia?

Puberphonia is also called as Mutational Falsetto, and is the inappropriate persistence of higher-pitched prepubertal voice, much beyond puberty. In the majority of cases of puberphonia, the larynx is anatomically and physiologically normal.

#### Is it seen only in males?

It is seen in both males and females, but it is more common in men and also more noticeable in men than in women.

During puberty, anatomical changes such as enlargement of the larynx (voice box), thickening and lengthening of vocal folds, occur in the larynx. Larynx descends and grows significantly larger in males which often results in a visible laryngeal prominence on the neck (Adam's Apple). All this results in a decrease in pitch in both males and females. These changes are more significant in males than in females and contribute to a deepening of the voice, characteristic of pubescent males. On average, the male voice deepens by one octave while the female voice lowers by a few semitones.

Men are expected to speak in a much lower pitch than women, and women typically speak in a much higher pitch. Hence the persistence of a high-pitched voice in adult- hood is more noticeable in men than in women.

#### What is its cause?

In the majority of cases of puberphonia, the larynx is anatomically and physiologically normal, and it is due to psychological reasons such as emotional stress, self- consciousness resulting from an early breaking of the voice. It is rarely due to immaturity of the larynx or vocal cords.

### What are the Clinical features?

Puberphonia is characterized by the failure to transition into the lower pitched voice of adulthood. The voice is characteristically high pitched, weak, breathy and monotonous and female in quality. It sounds immature and inadequately assertive. Although, sometimes the voice may drop in pitch in sudden vocal outbursts such as coughing or laughing.

# How is it diagnosed?

To determine whether you have puberphonia, a complete voice assessment is recommended. These assessments are performed by otorhinolaryngologists (ENT specialists) and speech-language pathologists. Otorhinolaryngologists will examine your voice box, assess your voice and make a diagnosis. He/ she may also assess the social and emotional consequences of the

symptoms experienced. The ENT specialist will then refer you to a Speech Language Pathologist (SLP) for further voice therapy.

## When should you seek help?

Voice is a person's identity. These disorders can lead to inferiority complex or depression. Therefore, it is very important to notice the disorder and treat it in time. There is no age bar to undergo the speech and voice modulation treatment. But when the intervention is delayed, the condition can become resistant to voice therapy. Hence, evaluation should be sought immediately on noticing the disorder.

#### How is it treated?

#### Direct Voice therapy:

This condition is most often treated using voice therapy (vocal exercises). These are given by speech-language pathologists (SLPs) or speech therapists. Various techniques are used by them to help you lower the pitch of your voice. Voice therapy usually produces a rapid resolution of the condition. Very rarely they need follow up therapy or psychological counseling. It is recommended to continue therapy until the patient's "new" voice is stabilized.

# <u>Indirect Voice</u> Therapy:

Indirect treatment options focus on creating an environment where direct treatment options will be more effective. Counselling performed by the SLP, rarely by a psychologist or counsellor, can help patients identify the psychological factors that contribute to their voice disorder and give them tools to address those factors directly. Patients may also be educated about voice care.

#### Surgery:

In few cases when voice therapy is ineffective, surgical interventions are considered. This can occur in situations where intervention is delayed or the patient is in denial, causing the condition to become resistant to voice therapy.

#### Relaxation Thyroplasty -

This is an extremely effective simple operation done through a small skin-crease incision over the neck under local anesthesia. It lowers the vocal pitch through relaxation and shortening of the vocal folds.