



## Effects of Medications on Voice

### Could Your Medication Be Affecting Your Voice?

Some medications including prescription, over-the-counter, and herbal supplements can affect the function of your voice. If your doctor prescribes a medication that adversely affects your voice, make sure the benefit of taking the medicine outweighs the problems with your voice.

Most medications affect the voice by drying out the protective mucosal layer covering the vocal cords. Vocal cords must be well-lubricated to operate properly; if the mucosa becomes dry, speech will be more difficult. This is why hydration is an important component of vocal health.

Medications can also affect the voice by thinning blood in the body, which makes bruising or hemorrhaging of the vocal cord more likely if trauma occurs, and by causing fluid retention (edema), which enlarges the vocal cords. Medications from the following groups can adversely affect the voice:

- Antidepressants
- Muscle relaxants
- Diuretics
- Antihypertensives (blood pressure medication)
- Antihistamines (allergy medications)
- Anticholinergics (asthma medications)
- High-dose Vitamin C (greater than five grams per day)
- Other medications and associated conditions that may affect the voice include:
  - Angiotensin-converting-enzyme (ACE) inhibitors (blood pressure medication) may induce a cough or excessive throat clearing in as many as 10 percent of patients. Coughing or excessive throat clearing can contribute to vocal cord lesions.
  - Oral contraceptives may cause fluid retention (edema) in the vocal cords because they contain estrogen.
  - Estrogen replacement therapy post-menopause may have a variable effect.
  - An inadequate level of thyroid replacement medication in patients with hypothyroidism.
  - Anticoagulants (blood thinners) may increase chances of vocal cord hemorrhage or polyp formation in response to trauma.

- Herbal medications are not harmless and should be taken with caution. Many have unknown side effects that include voice disturbance.

NOTE: Contents of this fact sheet are based on information provided by The Center for Voice at Northwestern University.