



**Al-Mustamsiriyah University
College of Medicine
Small Group Learning Committee**

**Scenario 3: Human Anatomy Department
Diagnosis: The Larynx – Hoarseness of Voice**

Fatima, a school teacher aged 48 years, presented to her general practitioner complaining of persistent hoarseness for 4–5 weeks. Over the preceding 5 months she had suffered two prolonged episodes of bacterial sinusitis and an infective exacerbation of her asthma, each requiring several weeks of various antibiotics and oral prednisone, and each associated with transient hoarseness. Fatima has generally well controlled asthma and has used inhaled medications for many years. Fatima's GP was concerned about the persistent hoarseness and referred her to an ear, nose and throat (ENT) surgeon who examined her lower pharynx and larynx with a fibre optic scope. In his letter back to the GP he described seeing 'a small red nodule' on her left vocal cord at laryngoscopy. There were no other abnormal findings and she was advised to watch and wait.

The Learning Objectives:

1. Describe the laryngeal cartilages, membranes, & muscles.
2. Describe how the intrinsic muscles of the larynx affect either the positions of the vocal ligaments, or vocal pitch.
3. Describe the neurovasculature (arteries and nerves) that serve the larynx.
4. What are the causes of acute and persistent hoarseness?
5. What are the indications for specialist referral in a patient with persistent hoarseness?
6. What is the diagnosis in this case and what are the risk factors for this condition?

References:

- Moore KL, Dalley AF. Clinically Oriented Anatomy, 5th ed. Baltimore, MD: Lippincott Williams & Wilkins, 2006:433-41, 461–7.
- Netter FH. Atlas of Human Anatomy, 4th ed. Philadelphia, PA: Saunders, 2006: plates 377, 379, 406.
- Snell RS. Clinical Anatomy by Regions, 8th ed. Baltimore, MD: Lippincott Williams & Wilkins, 2008:400–2, 408–9.