

Phonation speech

Phonation/speech

The larynx functions by closing the vocal fold against the air being exhaled from the lungs, but the rise in subglottic pressure forces the vocal folds apart slightly for an instant of time, resulting in an accompanying sinusoidal wave-like vibration of the vocal fold epithelium. The human vocal folds have a specialised tissue morphology with resultant biomechanical properties that allow phonation. The opening and closing occurs in rapid sequence to produce a vibrating column of air, which is the source of sound that can be articulated by the structure of the oral cavity to produce speech. Paralysis or disease of the vocal folds or closely associated laryngeal structures will give rise to disturbance of the sound, producing hoarseness. The functions of the larynx are given in Summary box 52.1 . Summary box 52.1 Functions of the larynx /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF - y are

Protection of the lower respiratory tract by: Closure of the laryngeal inlet Closure of the false cords Closure of the glottis Cessation of respiration Cough reflex Phonation Vocal folds produce sound by quasiperiodic vibration Respiration Control of pressure Fixation of chest Aids lifting, straining and climbing

Phonation/speech

The larynx functions by closing the vocal fold against the air being exhaled from the lungs, but the rise in subglottic pressure forces the vocal folds apart slightly for an instant of time, resulting in an accompanying sinusoidal wave-like vibration of the vocal fold epithelium. The human vocal folds have a specialised tissue morphology with resultant biomechanical properties that allow phonation. The opening and closing occurs in rapid sequence to produce a vibrating column of air, which is the source of sound that can be articulated by the structure of the oral cavity to produce speech. Paralysis or disease of the vocal folds or closely associated laryngeal structures will give rise to disturbance of the sound, producing hoarseness. The functions of the larynx are given in Summary box 52.1 . Summary box 52.1 Functions of the larynx /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF - y are

Protection of the lower respiratory tract by: Closure of the laryngeal inlet Closure of the false cords Closure of the glottis Cessation of respiration Cough reflex Phonation Vocal folds produce sound by quasiperiodic vibration Respiration Control of pressure Fixation of chest Aids lifting, straining and climbing

Revision #1

Created 2025-12-31 15:20:02 UTC by Omar Ayman

Updated 2025-12-31 15:20:02 UTC by Omar Ayman