Functional Dysphonia

Jason Y K Chan M.B.B.S.
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• Lee Akst MD
• Barbara Messing MA, CCC-SLP, BRS-S
Disclosures

• None
Objectives

• Define functional dysphonia
• Appreciate the diagnostic challenges of functional dysphonia
• Management of functional dysphonia
Definition

- Abnormal quality of voice in the absence of an identifiable lesion

- However there is debate and ambiguity with minor tissue changes and its relation to a primary functional disorder
Definition

• Common terms used include:
  – Muscle tension dysphonia
  – Psychogenic dysphonia
  – Hyperfunctional dysphonia
  – Ventricular disorder

• Bogart-Bacall syndrome
• Secondary functional dysphonia/muscle tension dysphonia (MTD)

– Organic pathologies leading to MTD e.g. vocal cord paralysis
Epidemiology

• Prevalence of voice disorders in the US 3%-9%
• UK 40,000 patients a year referred to voice therapy
• Herrington-Hall et al. 1988 found in 1262 voice patients, 57.6% had functional dysphonia
Etiology

- Psychological and personality factors
  - Anxiety
  - Depression
  - Neuroticism
  - History of sexual or physical abuse
  - Life events
Etiology

• Social factors
  – Vocal misuse/abuse
  – Professional voice users
Pathophysiology

• Inappropriate muscle tension
  – Increased extrinsic musculature tension
  – Laryngeal rise
  – Reduced thyrohyoid space

• Affects intrinsic musculature
  – Tension of vocal folds
Diagnosis

• Clinical exam:
  – Tightness of extrinsic laryngeal musculature
  – Decreased thyrohyoid space
  – Focal tenderness
Diagnosis

- Videostroboscopy
  - Adduction of ventricular folds to midline
  - Anterior posterior contraction
  - Extreme supraglottic squeeze
Management

• Indirect therapy:
  – Vocal hygiene:
    • Environmental advice
    • Vocal use
    • Personal behaviours
Management

• Direct therapy:
  – Circumlaryngeal manual therapy
  – Working on posture, breathing, phonation and articulation
Management

• Cognitive Behavioral Therapy

• Medical therapy: Botulinum Toxin

• Treatment of organic pathology if present
Functional Dysphonia

Van Houtte et al. 25 (2) 2011. Pathophysiology and treatment of muscle tension dysphonia
Examples: GK
Examples: GK

• Functional dysphonia:
  – Psychogenic
  – Emotional stress causes supraglottic strain
  – Periods of normal voice

  – Can present as MTD or conversion disorders e.g. mutational falsetto
Examples: EF
Examples: EF

• Functional dysphonia
  – Minimal arytenoid edema
  – Supraglottic strain with apposition of FVC on phonation
  – Plica ventricularis

• Chronic laryngitis likely secondary to smoking and reflux
Examples: KB
Examples: KB

• Functional dysphonia
  – False cord tension particularly noticeable on the right false cord
Examples: PB
Examples: PB

- Functional dysphonia
  - Likely MTD see supraglottic strain AP and also false cord
  - Possible SD given history
  - Trial of voice therapy followed
  - TA botox no improvement
Examples: TK
Examples: TK

- Secondary MTD
  - Right TVC paralysis
  - Supraglottic strain to compensate
Examples: CH
Examples: CH

• Functional dysphonia
  – MTD with AP shortening and false cord tension
Selected References


