

Functional Dysphonia

Jason Y K Chan M.B.B.S.



JOHNS HOPKINS

M E D I C I N E

JOHNS HOPKINS
HEALTH SYSTEM

Acknowledgements

- 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

Definition

- 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 behaviour

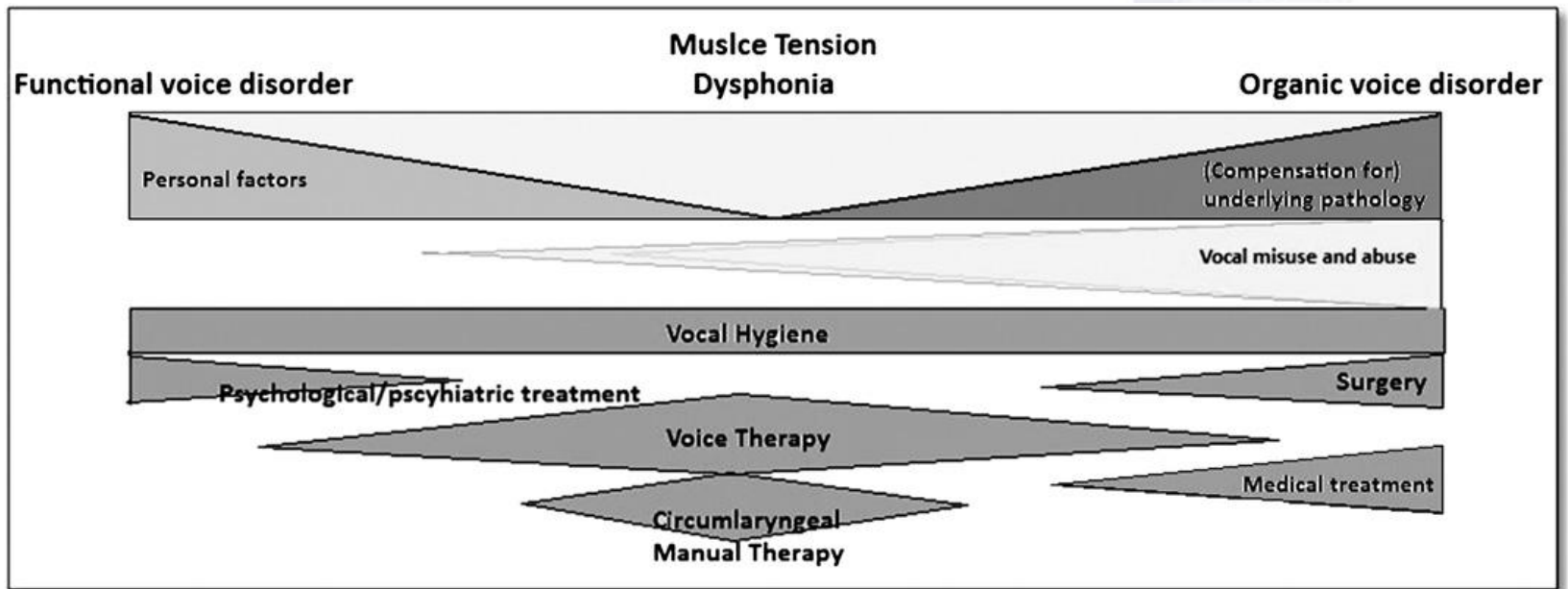
Management

- 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

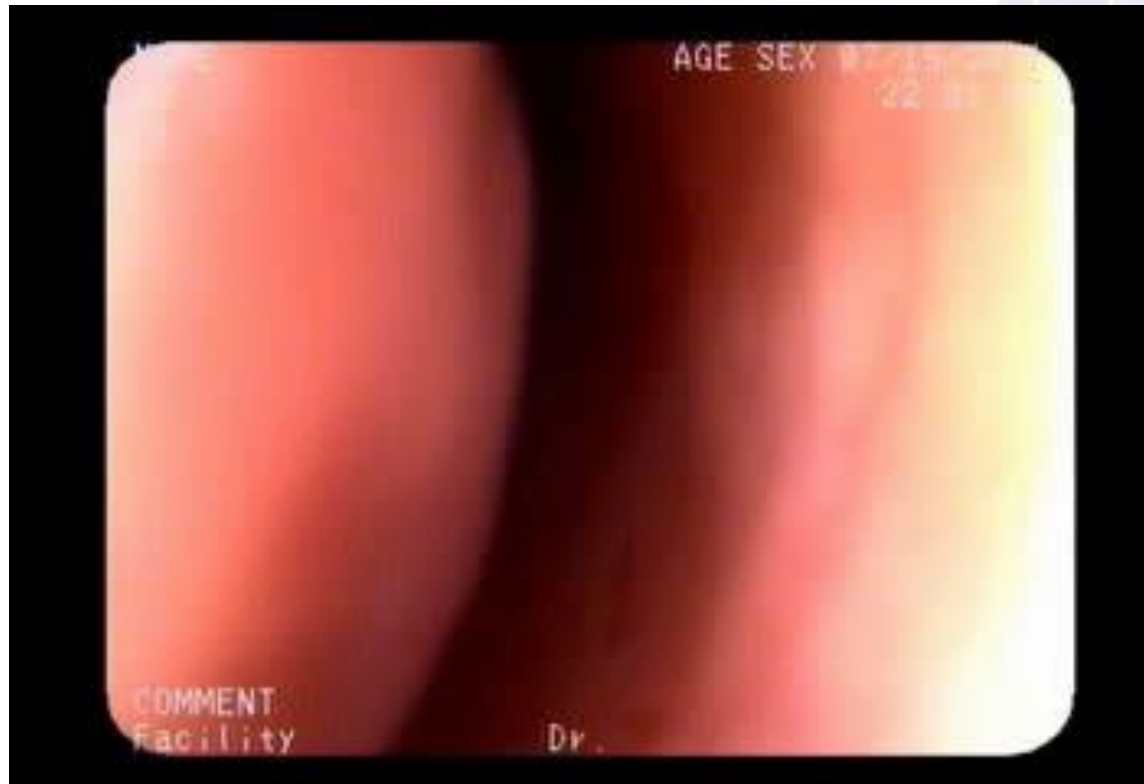
Examples: GK



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

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