Vocal Cord Dysfunction (VCD) / Inducible Laryngeal Obstruction (ILO)

WHAT IS VCD/ILO?

An involuntary and episodic closure of the vocal folds, typically during inspiration

Symptoms:

- Dyspnoea
- Cough
- Dysphonia
- Stridor



HOW DOES IT RELATE TO ASTHMA?

Symptoms are often mistaken for asthma

- VCD / ILO is an under-recognised alternate diagnosis to asthma
- VCD / ILO is also a frequent comorbidity of asthma (up to 30% of patients), which requires additional management

Diagnosis requires systematic & multidimensional assessment and specialist input

VOCAL CORD POSITION DURING INSPIRATION

NORMAL



VCD / ILO



Note: Variations may be observed including pre-vocal fold movement, partial closure or closure on one side

PREVALENCE

6.7%

SEVERE ASTHMA - REGISTRY

30%

DIFFICULT ASTHMA - SYSTEMATIC ASSESSMENT

50%

CHRONIC COUGH

DIAGNOSIS & ASSESSMENT:

- Questionnaires for screening & to measure symptoms
 - » Pittsburgh Vocal Cord Dysfunction Index
 - » Newcastle Larygeal Hypersensitivity Questionnaire
 - » Vocal Cord Dysfunction Questionnaire
- Clinical observations
 - » Rapid onset symptoms, often triggered by strong smells
 - » Symptoms: Inspiratory dyspnoea, stridor, cough, dysphonia and laryngeal tension, more obvious during physical activity
 - » Disparity between severity of symptoms and degree of lung function impairment
- Flexible transnasal laryngoscopy + odour challenge
- Continuous laryngeal exercise testing (CLE)
- Spirometry (flattened inspiratory arm on flow volume loop)
- Bronchoprovocation testing
- Dynamic laryngeal CT

TREATMENT OPTIONS:

NOTE: VCD / ILO does not respond to asthma treatment

- Speech pathology (e.g. breathing and cough suppression techniques)
- Continuous positive airway pressure (CPAP)
- Botox injections of the vocal cords
- Neuromodulating medication

Symptoms can be reduced through adequate hydration, reduced exposure to inhaled irritants, reducing phonotraumatic vocal behaviours, stress management and relaxation techniques.



