and refreshing exercises (78%), and to keep motivated (71%). Fewer patients rated observation of the therapist working with others (56%) and the opportunity to talk further with the therapist (56%) as reasons for group effectiveness and some felt they should attend group sessions more frequently.

Conclusion Group-delivered SLT is considered by patients to be effective in reducing chronic refractory cough. The main themes reported by patients, as contributory to the effectiveness of group therapy, were interaction with other patients and revising exercises. It is important, therefore, to seek patient feedback on therapy provision to ensure services are streamlined appropriately to maximise therapeutic outcomes.

**P5** PREVALENCE OF REFRACTORY CHRONIC COUGH IN A TERTIARY COUGH CLINIC

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Introduction and objectives In the past, some respiratory centres reported success rates of 98% when treating chronic cough based on identifying and treating underlying conditions such as asthma, nasal disease and gastro-oesophageal reflux. However, cases refractory to treatment of potential underlying causes are increasingly recognised, especially in specialist services. A hyper-responsiveness of the neuronal pathways controlling cough is thought to be the primary problem in these patients and antitussives targeting neuronal activity are most likely to be effective.

Methods A retrospective analysis of electronic notes at the Manchester University NHS Foundation Trust tertiary cough clinic was performed to identify treatment responses to conditions thought to be driving chronic cough.

Results We reviewed 300 electronic case notes of new patients seen between May 2015 and Sep 2016. After excluding those with incomplete records, lost to follow-up and still undergoing investigation, we analysed 276 chronic cough referrals (mean age 57.4 years, 65.6% female).

Cough spontaneously resolved in 14 (5.1%) cases. Ninety-nine (35.9%) had a cause identified, treatment of which led to an improvement in cough. However, of these 99, treatment response was unsatisfactory in 53 (19.2%), who went on to trial antitussive therapies for cough hypersensitivity syndrome. Of the 46 (16.7%) with a profound treatment response, the most common underlying diagnoses were asthma (12, 4.3%), reflux (10, 3.6%) and bronchiectasis (6, 2.2%). Overall, 15 different underlying diagnoses contributing to cough were identified, the treatment of which improved cough.

The remaining 163 (59.1%) patients either had no identifiable underlying diagnosis or did not respond to treatment trials of identified conditions, but had similar characteristics to the main cohort (mean age 57.5 years, 66.9% female).

Conclusions The aetiology of chronic cough at our tertiary cough clinic has a very different complexion to that reported in the literature. A variety of different conditions were found to contribute to cough but the majority had either no response or an inadequate response to standard therapies. Efforts must be focused on expanding the treatment options available for refractory chronic cough.

**P6** NON-PHARMACOLOGICAL COUGH SUPPRESSION THERAPY FOR COUGH ASSOCIATED WITH UNDERLYING LUNG DISEASE

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Introduction Chronic cough is a common and debilitating condition. Patients may have chronic refractory cough (CRC) with no clear cause, or cough associated with lung disease (explained cough). Cough reflex hypersensitivity may underlie all causes of cough and has been proposed as a specific ‘treatable trait’ in airways disease. In clinical practice, treatment of explained cough is often challenging and cough may persist even after conventional treatment of the underlying condition. Non-pharmacological cough suppression therapy (CST) has been shown to be an effective treatment for CRC, but there are no reports of using CST in explained cough.

Method Review of records from patients undergoing CST in the period 2014–2018. A subjective assessment of outcome was made by the treating therapist. Quality of life (QOL) (Leicester cough questionnaire, LCQ) and laryngeal symptoms (Newcastle Laryngeal Hypersensitivity Questionnaire, LHQ) were recorded before and after therapy. The minimally important clinical difference (MCID) for LCQ is 1.3 and for LHQ is 1.7.

Results 98 (74.5% female) patients with explained cough, mainly associated with airways disease (asthma (n=58), COPD (n=12), bronchiectasis (n=16), xerotrachea due to CTD (n=5) and ILD (n=7), underwent CST. Most (89.8%) had a cough for at least one year. Median number of CST sessions = 3 (range 1–6). Subjectively, 51.0% of patients improved, treatment was unsuccessful in 24.5%, 20.4% were lost to follow up and 4.1% had deteriorating health. Pre and post treatment objective data were available for 57 patients for QOL (LCQ) and 51 patients for laryngeal symptoms (LHQ). At the start of treatment, patients reported impaired QOL (Baseline mean LCQ: 11.36(SD 4.12)) and significant laryngeal symptoms (Baseline LHQ mean: 14.69(SD 3.16)). CST improved both...