irritant. It is unclear if ILO is a direct response to the irritant stimulus itself e.g., via mucosal inflammatory reactions or related to altered reflex sensitivity and if there is an association with other respiratory co-morbidities.

Aim To evaluate laryngoscopic findings, provocation challenge irritants and the association with other co-morbidities in a complex breathlessness service.

Method Demographics, clinical outcomes and provocation challenge data were collected for 50 patients who attended the Manchester Airways Service over an 8-month period and had a diagnosis of ILO confirmed on laryngoscopy.

Results Of 50 patients [44 female, mean (SD) age 47 (13.5) years] with a confirmed diagnosis of ILO, 45 (90%) had inspiratory glottic ILO, 20 (40%) inspiratory supraglottic ILO [15 (30%) had both], and 3 (6%) expiratory ILO. 36 (72%) had asthma, 18 (36%) cough, 28 (56%) breathing pattern disorder (BPD), 20 (40%) reflux and 19 (38%) nasal disease. The median (IQR) vocal cord dysfunction questionnaire (VCDQ) was 46 (42–50).

15 patients (30%) required aerosol challenge, 7 (14%) mechanical challenge, 2 (4%) mimicking spirometry, 9 (18%) deep inspiratory breath, 4 (8%) food/drink, 1 (2%) exercise and 13 (26%) did not need to be challenged as they were already symptomatic. There was no clear association between ILO provocation trigger and co-morbidities (figure 1).

Conclusion Patients with ILO have a range of triggers that will provoke their breathlessness symptoms. Their does not appear to be any pattern to the triggers depending on other respiratory or upper airway co-morbidities and patients’ awareness of their inducer appears to be a more reliable indicator. Future research is required to understand phenotype of ILO and the impact of co-morbidities on laryngeal dysfunction.

<table>
<thead>
<tr>
<th>Abstract P104 Table 1</th>
<th>Improvements in symptoms and medication use post SLT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category</strong></td>
<td><strong>Pre SLT</strong></td>
</tr>
<tr>
<td>Mean (SD) VCDQ</td>
<td>46 (6.62)</td>
</tr>
<tr>
<td>Inhaler use (n%)</td>
<td>48 (91%)</td>
</tr>
<tr>
<td>Mean steroid courses/year</td>
<td>3</td>
</tr>
<tr>
<td>Mean antibiotics courses/year</td>
<td>2</td>
</tr>
<tr>
<td>EpiPen use (n%)</td>
<td>9 (17%)</td>
</tr>
</tbody>
</table>

P105 AIRWAY STENTS: DEVELOPMENT OF A PHYSIOTHERAPY MANAGEMENT GUIDELINE

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10.1136/thorax-2023-BTSabstracts.257

Introduction Airway stents can be used as a palliative intervention or as a bridge to curative therapy for patients with central airway obstruction, usually due to malignancy. There have been significant advances in airway stents and the number of surgeries has significantly increased. However, stent-related complications occur in up to 60% of patients, with retained secretions causing up to 20% of such complications (Lee et al 2017). Retained secretions are a crucial aspect of respiratory physiotherapy. Despite this, there are no respiratory physiotherapy management guidelines for patients following airway stent insertion.

Methods A multi-step method of data collection was followed. A scoping review was conducted in four different scientific databases and the search strategy included all known variations of keywords around ‘respiratory physiotherapy’ AND ‘airway stent’. A local audit of the current physiotherapy management was performed as well as benchmarking against other trusts via a telephone call. An expert panel was set up and reviewed all aspects of stent patient care.

Results The literature review did not find any studies directly linked to the physiotherapy management of airway stents and there was no recommended best practice. One study by Tjahjono et al (2018) included respiratory physiotherapy in their post-op management. The audit included
the results of 22 patients. 65% of patients seen on day 1 had evidence of retained secretions. On discharge, only 50% of patients had an effective airway clearance technique (ACT). The benchmarking did not provide any consensus for the management of airway stent patients. Two large trusts were contacted but had no guidelines or pathways in place. The expert panel each gave recommendations for best practice which was then implemented into the pathway to guide the final draft. A respiratory physiotherapy patient pathway was developed (figure 1), alongside a patient information leaflet and the establishment of fortnightly MDT meetings.

Conclusion Airway stenting is a new and novel area of respiratory medicine with the limited evidence available. This respiratory physiotherapy pathway has been developed as an initial guide to best practice for physiotherapy care of patients post stent insertion with the aim of further research.

P106 TO HUFF OR NOT TO HUFF: COULD FORCED EXPIRATORY MANOEUVRES BE IMPEding AIRWAY CLEARANCE IN LARGE AIRWAY COLLAPSE?

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Background There is minimal literature present on the role of physiotherapy in the management of Large Airway Collapse and airway clearance. Most articles state management should involve chest physiotherapy without the explanation of what physiotherapy may offer. A staple of airway clearance advice in physiotherapy is to encourage Forced Expiratory Manoeuvres (FET) such as HUFF. We hypothesised that a huff worsened airway collapse and impedes airway clearance in this group.

Method Following clinical evidence of suspected dynamic airway collapse patients underwent a Flexible Bronchoscopy under light sedation to quantify any collapse. Quantification was completed through visual inspection and agreement on degree of collapse by at least two specialist clinicians. During the procedure the patient was asked to perform tidal breathing and FETs to assess if these techniques worsened the degree of collapse.

Results 16 patients underwent bronchoscopy to assess for airway collapse that included performing FETs. 87% (n=14) demonstrated worsening collapse of greater than 10% on FETs. Of the 2 patients that did not 1 patient already had 100% collapse.

Discussion There is emerging evidence to indicate the use of Forced expiratory techniques in airway clearance may be a detriment to the patient and likely lead to insufficient clearance. This has potentially large implications on physiotherapy management as a Huff technique is often the first line of treatment for airway collapse. Furthermore in breathlessness associated with the airway collapse these techniques may exacerbate the symptoms of breathlessness and promote hyperinflation through gas trapping in COPD patients. As a result of this, adapting techniques to promote secretion mobilisation with limited FETs should be a consideration for patients that present with large or dynamic airway collapse.

Future research The sample size is small in this study therefore further expanding this would help provide clarity in the area.