

Conclusion Patients with a higher baseline exacerbation rate were more likely to receive ICS- containing therapies compared to those taking bronchodilators alone. Across all maintenance therapy groups, GP visits and non-COPD related hospitalisations were the primary driver of total costs.

Pulmonary rehabilitation and physical activity

P133 A MULTIDISCIPLINARY PATIENT EDUCATION PROGRAMME SIGNIFICANTLY IMPROVES ASTHMA CONTROL AND QUALITY OF LIFE IN PATIENTS WITH SEVERE ASTHMA

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Background The impact of severe asthma upon quality of life is significant, as a consequence of unpredictable hospitalisations and life-threatening attacks. It is unknown whether patient education programmes in severe asthma improve self-management, quality of life or measures of asthma control.

A 12 week patient education programme was piloted within a severe asthma multi-disciplinary team. Sessions were 2 h duration fortnightly. The aim of the programme was to enable patients to gain greater insight into their disease, treatment options and lifestyle management with emphasis on improving asthma control and quality of life.

Aims Our aim was to assess the effect of the introduction of this programme upon participant's asthma control and quality of life.

Methods Prospective data collection was performed, including Asthma Quality of Life Questionnaire (AQLQ), Asthma Control Questionnaire (ACQ) and Hospital Anxiety and Depression (HAD) at week 1 and 12. Patient Satisfaction Evaluation forms were completed to facilitate ongoing programme development.

Results 21 patients entered with 16 (76%) completing the 12 week programme (12 female, 4 male). Dropout was attributed to difficulty attending on a regular basis. There was an improvement in mean total AQLQ of 1.3 (minimal clinically important difference >0.5). There was notable improvement in the AQLQ domains; symptoms (0.8) and emotional (0.7). Mean ACQ improved by 0.7 ($p < 0.05$), mean HAD anxiety and depression scores fell but this did not reach statistical significance (Table 1).

Conclusion A multidisciplinary patient education group for severe asthma patients significantly improves quality of life and

asthma control. Longitudinal studies are required to determine impact upon exacerbations and hospitalisations.

P134 EXERCISE RESPONSES TO ONE-LEGGED CYCLING IN PATIENTS WITH IDIOPATHIC PULMONARY FIBROSIS

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Introduction Pulmonary Rehabilitation is recommended for patients with Idiopathic Pulmonary Fibrosis (IPF) although the magnitude of benefit appears less compared to those with other chronic lung diseases. Patients with IPF may not be able to sustain high-intensity training to induce physiological change due to a ventilatory limitation to exercise. One strategy to circumvent this in COPD has been to reduce the exercising muscle mass by cycling one leg at a time during the same exercise session. Randomised controlled trials have shown greater improvements in exercise capacity after training using one-legged cycling (OLC) compared to two-legged cycling (TLC).^{1,2} We, therefore, compared OLC to TLC responses during incremental and constant work rate (CWR) exercise in patients with IPF.

Methods Patients were recruited from a tertiary referral centre if they met the current NICE diagnostic criteria for IPF with a MRC dyspnoea grade ≥ 2 . Exclusion criteria included a requirement for long-term oxygen therapy. Participants completed four Cardiopulmonary Exercise Tests (CPETs) to intolerance on a cycle ergometer with expired gas analysis. The tests were completed on separate days: 1) two-legged maximal incremental test (TLC-ICE); 2) one-legged maximal incremental test (OLC-ICE); 3) two-legged CWR (TLC-CWR) test at 70% peak power achieved on the TLC-ICE; 4) one-legged CWR (OLC-CWR) test at 35% TLC-ICE peak power.

Results Twelve participants (11 male, mean [SD] 73 [8] yrs, BMI 30.6 [4.8] kg/m², FVC% predicted 71.8 [20.3]%, resting SpO₂ 98 [1]%) completed all four CPETs demonstrating a ventilatory limitation to exercise (92 [14]%) maximum voluntary ventilation [MVV]). Although the OLC-ICE peak oxygen uptake (peak VO₂) was significantly lower than the peak VO₂ TLC-ICE ($p < 0.001$) the OLC: TLC was high at 0.85. The OLC-CWR was endured for more than twice the TLC-CWR ($p < 0.001$) at the same muscle-specific power leading to almost double the work being performed (Table 1).

Abstract P133 Table 1

	AQLQ Total (mean)	AQLQ Symptoms (mean)	AQLQ Activity (mean)	AQLQ Emotional (mean)	AQLQ Enviro (mean)	ACQ 6 (mean)	HAD Anxiety (mean)	HAD Depression (mean)
Week 1	2.6	2.7	2.6	2.9	3.08	3.9	9.6	9.1
Week 12	3.9	3.5	3.1	3.6	3.22	3.2	8.5	7.5
Change from Baseline	↑1.3	↑0.8	↑0.5	↑0.7	↑0.1	↓ 0.7-	↓1.1	↓1.6
p value	p = 0.06	p = 0.04	p = 0.1	p = 0.07	p = 0.3	p = 0.05	p = 0.27	p = 0.18

The patient evaluation forms demonstrated significant patient satisfaction with the programme, highlighting the positive impact that the sessions have had upon their life.