

Recent was defined as admission within the last 3 months prior to the interview. The interviews were conducted in patients' homes. The sample comprised 12 males (63%), 7 (37%) females. The mean age for males and females was 70 years. The data was coded and grouped into 5 categories. The findings for the categories: "Going to hospital" and "Discharge from hospital" are presented.

Findings COPD patients have much experience in managing an exacerbation of their condition and can recognise significant changes in their health status requiring urgent hospitalisation. The findings for "Going to hospital" include: who patients rely on to make the decision, how the decision is made/or avoided and their emotive experiences of going to hospital. Patient experiences around "Discharge from hospital" include: consultation, confusion, timeliness and (lack of) streamlining in the discharge process. Patient narratives will be presented.

Conclusion Decision-making about going to hospital and the subsequent discharge process can be viewed as the beginning and end points in the hospitalisation journey for COPD patients. Patient experiences about these points in the journey give key insights into decision making, quality care and identify benchmarks for future reviews of service provision to COPD patients.

P81 LUNG TRANSPLANTATION IN ALPHA-1-ANTITRYPSIN DEFICIENCY

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Background Lung transplantation is an option for a proportion of patients with end-stage lung disease who deteriorate despite optimal medical therapy. In patients with alpha-1-antitrypsin deficiency (A1ATD), survival benefit has been demonstrated following transplantation. Patient selection is often subjective and the effects of transplantation on Health Related Quality of Life (HRQOL) in A1ATD are unknown. The aims of the current study were to determine objective measures influencing patient selection, survival benefit and health status following lung transplantation in A1ATD patients.

Methods Between 1996 and 2011, patients with A1ATD (PiZ) who had undergone lung transplantation were identified from the UK A1ATD registry. Lung function parameters, including rates of decline pre-transplant, were compared to matched subjects who did not undergo transplantation (matched for sex, age, smoking history and FEV₁). HRQOL, assessed using the St George's Respiratory Questionnaire (SGRQ), was measured pre and post-transplant together with mortality data.

Results Patients who underwent transplantation (n=32) had significantly worse HRQOL than patients who did not in all domains of the SGRQ (total score 64.2; SE±2.5 vs. 55.3±2.04, p=0.008). Markers of gas transfer (TLCO and KCO) were both significantly lower in the transplantation group (33.5%±3.0 and 41.0%±3.9 predicted respectively, compared to 50.6%±.69 and 57.58%±3.1 predicted in the non-transplant group p<0.001 & p=0.001). There were no differences in the rate of lung function decline compared to non-transplanted patients.

Sixteen transplant patients died in the follow up period (6 perioperatively). Figure 1 summarises the Kaplan-Meier survival curve following transplantation. There was no relationship to pre-transplant physiology. Once a survival time of 5 years had been reached, mortality was due to causes unrelated to A1ATD or the transplant.

There was a significant improvement in spirometry (23.94±1.0 vs. 92.73±9.2, p=0.002, N=16) and all domains of the SGRQ post lung transplantation, including the total score (64.2±2.5 vs. 15.6±4.9, p=0.002).

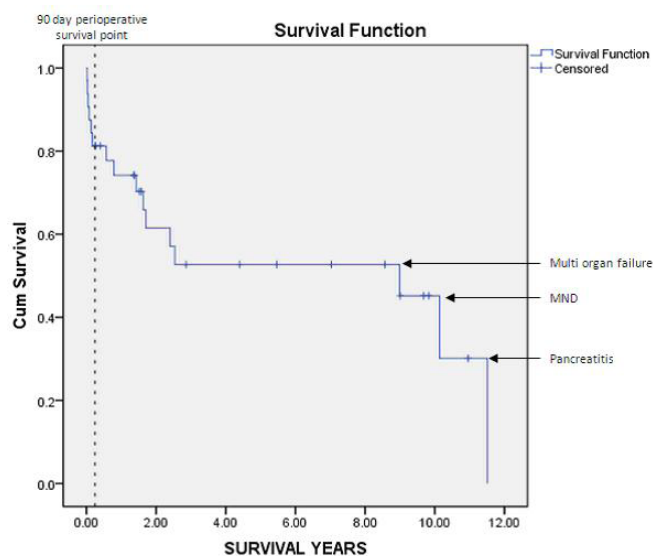


Figure 1 Kaplan-Meier survival curve following transplantation with cause of death post 5 year survival.

Abstract P81 Figure 1

Conclusion Patients who underwent lung transplantation had worse gas transfer parameters pre transplant compared to the otherwise matched A1ATD patients who did not. Lung transplantation in patients with end-stage lung disease secondary to A1ATD significantly improved HRQOL.

P82 EFFECT OF HOSPITALISATION FOR ACUTE EXACERBATIONS OF COPD ON SUBSEQUENT QUALITY OF LIFE

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Background The longitudinal change in quality of life (QoL) following hospitalisation for acute exacerbations of COPD (AECOPD) is uncertain. Current guidelines suggest that non-invasive ventilation (NIV) should not be considered if there is no "potential for recovery to QoL acceptable to the patient", [1] but the expected QoL recovery in this population has not been reported.

Methods 183 patients (82 treated with NIV) with AECOPD surviving to hospital discharge were identified prospectively. QoL questionnaires were completed at hospital discharge and at four predefined intervals during the year following discharge, however, for brevity, only the results of the St. George's Respiratory Questionnaire (SGRQ) are reported. Baseline clinical information and subsequent mortality and readmission over 12 months were recorded. Longitudinal QoL was summarised by calculating the mean change in SGRQ (mean change < 0 indicates a QoL improvement during follow-up), with the minimal clinically important SGRQ change taken as ±4.

Results Mean (SD) age was 69.0 (9.0) years and most patients: were female (58.5%); had severe airflow obstruction (mean (SD) FEV₁ 40.2 (17.3) % predicted); and were of normal weight (mean (SD) BMI 26.2 (7.0) kgm⁻²). The 12-month readmission and mortality rate were 71% and 18% respectively.

7 patients failed to attend follow-up after discharge and were excluded from analysis. For both patient groups, self-reported respiratory symptoms (SGRQ Symptoms) improved by a clinically important amount during follow-up. For the total population, average overall QoL (SGRQ total) improved during follow-up (mean (SD) change in SGRQ total = -2.47 (13.0)), but not by a clinically important amount. Patients not treated with NIV experienced both

a clinically important QoL improvement and a significantly greater improvement than those treated with NIV. However, the average quality of life of those treated with NIV did not decline by a clinically important amount (table 1).

Conclusions On average, patients hospitalised with AECOPD not requiring NIV experience an improvement in QoL following discharge and in those treated with NIV, QoL does not appear to decline. Most patients can expect their quality of life to be no worse than that reported at hospital discharge.

Reference

1. BTS The Use of Non-Invasive Ventilation in the management of patients with chronic obstructive pulmonary disease admitted to hospital with acute type II respiratory failure, 2008.

Abstract P82 Table 1 Mean change in quality of life during follow-up

Mean change in QoL (mean (SD)),†	Total population, n=176	Ventilated, n=80	Not ventilated, n=96	p value*
SGRQ Symptoms	-8.65 (19.5)	-4.80 (19.4)	-11.8 (19.2)	0.017
SGRQ Activity	1.79 (12.0)	3.22 (10.2)	0.60 (13.3)	0.15
SGRQ Impacts	-2.98 (15.4)	-0.09 (15.5)	-5.36 (14.9)	0.024
SGRQ Total	-2.47 (13.0)	0.05 (12.5)	-4.55 (13.2)	0.019

* comparison between ventilated and not ventilated groups; † lower values indicate improved quality of life, minimally important clinical difference = ±4

P83 RELATIONS OF DIFFERENT QUALITY OF LIFE TOOLS TO SUBSEQUENT MORTALITY AND READMISSION OF PATIENTS SURVIVING HOSPITALISATION FOR ACUTE EXACERBATIONS OF COPD

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Background In patients hospitalised with acute exacerbations of COPD (AECOPD), quality of life (QoL) scores have been associated with subsequent mortality and readmission. We have investigated which of several QoL indices are most closely related to subsequent outcome.

Methods 183 patients with AECOPD surviving to hospital discharge were identified prospectively. Baseline clinical information and subsequent mortality and readmission over 12 months were recorded. QoL was assessed at discharge using: the St. George’s Respiratory Questionnaire (SGRQ); the Chronic Respiratory Questionnaire (CRQ); the Hospital Anxiety and Depression Scale (HADS); and the Nottingham Extended Activities of Daily Living Scale (NEADL) and relationships between QoL and each outcome were analysed.

Abstract P83 Table 1 Quality of life at discharge and subsequent outcome

Quality of life measurement	Died, n=33	Survived, n=150	p value	Readmitted, n=130	Not readmitted, n=53	p value
SGRQ, mean (SD)†	63.3 (20.8)	66.7 (19.7)	0.38	66.3 (19.5)	65.6 (20.8)	0.85
Symptoms	85.0 (12.8)	77.9 (16.3)	0.021	81.1 (14.8)	74.6 (17.8)	0.012
Activity	55.7 (19.1)	48.9 (19.8)	0.071	51.4 (20.5)	47.1 (17.6)	0.19
Impacts	65.6 (15.2)	60.7 (17.1)	0.13	62.6 (17.6)	59.1 (14.9)	0.21
CRQ, median (IQR)‡	2.8 (1.7 to 4.1)	2.8 (2.15 to 3.8)	0.56	2.8 (2 to 4)	2.8 (2 to 3.6)	0.46
Dyspnoea	2.3 (1.5 to 3)	2.4 (1.5 to 3.3)	0.83	3.4 (2.4 to 4.9)	3.6 (2.4 to 4.8)	0.90
Emotional function	3.7 (2.65 to 4.4)	3.4 (2.38 to 4.9)	0.69	2.3 (1.5 to 3)	2 (1.3 to 3.2)	0.56
Fatigue	3 (2.15 to 4.15)	3.3 (2.2 to 4.5)	0.60	3 (2.3 to 4.3)	3.3 (1.8 to 4.9)	0.92
Mastery						
HADS, median (IQR)†	8 (5 to 12.5)	8 (4 to 14)	0.93	8 (4 to 14)	9 (4.5 to 13)	0.83
Anxiety	8 (5 to 10.5)	6 (3 to 9)	0.082	6 (3 to 10)	6 (3 to 8)	0.37
Depression						
NEADL, median (IQR)‡	28 (14 to 37)	38 (28 to 45)	<0.001	34 (24 to 42)	42 (33 to 51)	0.001

†Lower values indicate improved quality of life; ‡Higher values indicate improved quality of life. SGRQ – St George’s Respiratory Questionnaire; CRQ – Chronic Respiratory Disease Questionnaire; HADS – Hospital Anxiety and Depression Scale; NEADL – Nottingham Extended Activity of Daily Living Scale.

Results Mean (SD) age was 69.0 (9.0) years and most patients: were female (58.5%); had severe airflow obstruction (mean (SD) FEV₁ 40.2 (17.3) % predicted); and were of normal weight (mean (SD) BMI 26.2 (7.0) kgm⁻²).

130 (71%) patients were readmitted during the year following discharge, with a median number of readmissions of 1 (IQR 0 to 3; range 0 to 15). The mortality rates at 3, 6 and 12 months following discharge were 6.6%, 10.4% and 18.0% respectively.

Self-reported measures of activity (SGRQ Activity and NEADL) were the only QoL indices significantly associated with both mortality and readmission. The relations of SGRQ Impacts and HADS Depression to mortality showed nonsignificant trends, but no other QoL domains were associated with readmission (table 1).

Conclusion Measures of self-reported activity at discharge were the most closely associated with both subsequent mortality and readmission and are likely to be the most useful of the QoL indices studied for predicting clinical outcome.

P84 UTILITY VALUES FOR COPD PATIENTS BASED ON THE EQ-5D QUESTIONNAIRE FROM THREE INDACATEROL PHASE III STUDIES

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Introduction and Objectives Chronic obstructive pulmonary disease (COPD) is characterised by airflow limitation that is not fully reversible and disabling symptoms such as breathlessness and COPD exacerbations, which have a negative impact on health-related quality of life (HRQoL). The indacaterol clinical trial programme (INVOLVE, INHANCE and INLIGHT-2 trials) collected HRQoL using the EuroQoL (EQ-5D) instrument, a commonly used tool to generate preference-based utilities involving five dimensions of a health state. As part of the clinical trial programme, the EQ-5D scores were converted to a utility index score using the UK National Health Survey (1) preference weights. The aim of this analysis was to report mean utilities of COPD patients by disease severity.

Methods A total of 11,066 observations from three trials were included in the analysis. Utility index scores were summarised by disease severity (GOLD 2008 FEV1-based) to yield a mean utility weight for each disease severity class. Disease severity was determined by using all available FEV1 readings. Since some trials had a longer duration contributing more records of EQ-5D and spirometry than others, it was necessary to correct for multiple observations; utility values that might have been derived from the shorter-duration trials were considered as ‘missing’ data. To impute