317 Resilience, physical and psychical well-being and health related quality of life in adult CF patients

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Objective: Until now, little is known about the relationship between resilience and physical and psychical well-being in adult CF patients.
Aim: To prospectively measure resilience in adult CF patients and to compare it with physical and psychical well-being and quality of life and a standard age-matched population from the literature.
Methods: Quality of life was measured with the CFQ-R, physical well-being with the Psychological General Well Being Index (PGWBI, scaling 0–100) and resilience with the 25-Resilience Scale of Wagnild and Young.
Results: 32 patients (13 females) with a mean age of 29±1 y, body-mass index (BMI) of 22.3±3.4 kg/m^2, FEV1 of 67±29% and estimated 5-year survival of 74±15% are evaluated. Results of CFQ-R were: physical well-being 74±25, vitality 59±23, emotion 79±19, eating 93±20, treatment burden 75±19, health perception 72±24, social role 72±18, body image 73±24, role 73±24 weight 77±32, respiration 68±19 and digestion 79±23. PGWBI was 74±15 and 25RS 143±14 (normal population 135±29). One patient had a low resilience (value of 112), 7 moderately low (123±4), 8 moderate (141±2), 12 moderately high (152±4) and 4 high (164±2). Resilience was only moderately correlated with vitality (rho = 0.39, p = 0.04), eating (0.45, 0.01), social role (0.42, 0.02) and PGWBI (0.47, 0.01) but was not correlated with age, BMI, LRS and the other domains of the CFQ-R.
Conclusion: In contrast to an age-matched normal population resilience is higher in our moderately ill adult CF patients. Resilience is not related to age, BMI, FEV1 and estimated 5-year survival and only moderately correlated with some aspects of health-related quality of life (vitality, eating, social role and PGWBI).

318 Prediction of lung function by psychological symptoms and life satisfaction in patients with cystic fibrosis

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Objective: Psychosocial factors may impact the course of chronic conditions such as CF. Previous research demonstrated that health-related quality of life domains may predict the survival in adults with CF. Within a biopsychosocial model of CF, this study was designed to evaluate whether patient-reported symptoms of anxiety or depression and different domains of life satisfaction could predict the lung function status two years later.
Methods: In the context of the TIDES study patients completed the Hospital Anxiety and Depression Scale and the Questions on Life Satisfaction (general, health-related and CF-specific) in 2007. The patients' lung function (FEV1%) in 2009 was retrieved from the German CF registry. Overall, data from 269 patients (age range, 12–52 years; 53.5% men) were available to perform a multiple regression analysis.
Results: Symptoms of anxiety ($\beta = 0.316$; $p < 0.001$) and depression ($\beta = -0.359$; $p < 0.001$), CF-specific life satisfaction ($\beta = 0.290$; $p = 0.001$) and general life satisfaction ($\beta = -0.164$; $p = 0.051$) together account for about 17 percent of the variance of the lung function status two years later.
Conclusions: The findings indicate that psychosocial aspects are important issues concerning the medical course of CF, demonstrated here regarding lung function. The results emphasize the need to provide psychosocial service and supportive psychological interventions for patients with CF as part of routine care.

319 Do symptoms of depression determine the course of lung function in patients with cystic fibrosis?

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Objective: An inverse association of lung function status and depressive symptoms in patients with CF is known. The aim of the current study was to evaluate whether patient reported symptoms of depression impact lung function status two years later.
Methods: In the context of the TIDES study patients completed the Hospital Anxiety and Depression Scale in 2007. Medical data (FEV1% 2007 and 2009) were retrieved from the German CF registry. Overall, data from 359 patients (age range, 12–52 years; 53.5% men) were available to perform repeated measure MANOVA. Patients were divided into four groups using the following factors: depressive vs. not depressive and having a severe FEV1% at baseline vs. a moderate or good FEV1% at baseline (depressive: FEV1% <40, n = 21; FEV1% ⩾40, n = 17; not depressive: FEV1% <40, n = 58; FEV1% ⩾40, n = 263).
Results: The results showed a significant main effect of time ($F = 4.95$; $p = 0.027$), a significant main effect of state of depression at baseline ($F = 105.24$; $p < 0.001$) as well as a significant depression × time interaction effect ($F = 4.93$; $p = 0.002$). Three of the four groups showed a decrease in lung function over the course of the two years. Against the odds, patients who already had a severe lung function status at baseline and did not report noticeable depressive symptoms, showed an increased FEV1% two years later.
Conclusion: The findings indicate that symptoms of depression are an important risk factor concerning the medical course of CF, especially in patients with severely restricted lung function. Therefore adequate interventions should address self-efficacy, activation of patients and reduction of depressive symptoms.

320 Anxiety and depression in CF in the UK (TIDES-UK)

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Objectives: Rates of depression and anxiety in people with CF and their care-givers have been investigated in the International Depression & Anxiety Epidemiological Study (TIDES). This paper reports data from 39 UK CF centres. To date 21 centres have recruited >70% of the available clinical population – the epidemiological threshold set by the study group.
Methods: Adolescents and adult patients together with parent caregivers were recruited during regular, scheduled clinic visits. They all completed the HADS immediately prior to consultation. Parent caregivers additionally completed the CES-D questionnaire.
Results: Data from 2406 participants (1615 adults, 215 adolescents and 576 parent-caregivers) are presented. Moderate/severe anxiety was reported by 12.9% of adults, 10.9% of adolescents and 21.1% of parent caregivers. Moderate/severe depression was reported by 3.6% of adults, 1% of adolescents and 4.9% of caregivers. However, using the CES-D scale to measure depression, 28.3% of parent caregivers reported moderate/severe depressive symptoms.
Conclusions: Anxiety is more prevalent than depression, particularly in parent caregivers, this concurring with previously implied [1]. Counter-intuitively, depression as measured by the HADS is very low in all groups, being almost non-existent in adolescents. However, given the discrepancy between depression rates in parent caregivers on the HADS and CES-D, full consideration needs to be given to the merits of the HADS as a screening tool for psychopathology in CF groups. Results will be discussed in the context of clinical implications and recommendations.

Reference(s)

[1] Chest 2002; 2: 645–50.