Hot topics from the Assemblies

Water-based exercise in COPD with physical comorbidities: a randomised controlled trial

Authors: McNamara RJ, McNamara SH, McKenzie DK, et al.

Summary: The aim of this randomised controlled trial was to determine the effectiveness of water-based exercise for improving exercise capacity and quality of life in COPD patients with physical comorbidities, compared with usual care and controls. Participants were randomised to water-based or land-based exercise, which consisted of three sessions per week for eight weeks, or control groups, with no exercise. Water-based exercise significantly increased endurance and incremental shuttle distances and chronic respiratory disease questionnaire fatigue scores compared with land-based exercise and controls, and it was walking distance and chronic respiratory disease questionnaire dyspnoea scores compared with controls alone. Water-based exercise was more effective for improving exercise capacity and quality of life in COPD patients with physical comorbidities.

Usability of digital media in patients with COPD: a pilot study


Summary: This pilot study investigated the opinions of nine COPD patients towards five different digital media products for use in telemedicine. Audio device was used to answer questions related to health status and symptoms, and patients then evaluated the device by answering questions on usability, size, and satisfaction. The network was the device of choice due to good response time, large screen and ease of use, whereas the smartphone was the least popular due to its small size. These insights might help in the implementation of telemedicine for patients with COPD as these devices become more common.

Factors to inform clinicians about the end of life in severe chronic obstructive pulmonary disease

Authors: Beaton K, Lewon PN, Nevir S, et al.

Summary: Assessing the prognosis in terminal COPD patients can be difficult and thus has led to palliative care not being offered, as with other terminal illnesses. This study sought to determine if changes in measurable parameters in terminal COPD patients could predict short-term mortality. In patients with chronic obstructive pulmonary disease, parameters such as change in lung function, physical activity levels, and quality of life were assessed. The results showed that changes in these parameters could be used to inform clinicians about the end of life.

Effect of preterm birth on later FEV1: a systematic review and meta-analysis


Summary: There is a growing body of evidence suggesting a link between preterm birth and lung function. In order to assess this effect, this study reports a meta-analysis comparing term and preterm-birth and FEV1. Data were acquired from studies of FEV1 in late life for preterm-birth patients, former smokers with COPD, and non-smokers, through prospective testing and demographic and symptom questionnaires. Emphasis was placed on the reduction in CFTR in the lower airway compared with non-smokers, as did former smokers with COPD. There was correlation between lower airway CFTR activity and smoking, chronic bronchiectasis, and dysphonia. Thus, acquired CFTR dysfunction can have a role in COPD.

Acquired CFTR dysfunction in the lower airways in COPD

Authors: Dransfield MT, Wilhelm AM, Flanagan B, et al.

Summary: Acquired CFTR dysfunction can have a role in COPD. This study aimed to assess the relationship between CFTR activity and clinical characteristics in a large group of patients with and without COPD. This study reports a meta-analysis comparing term and preterm-birth and FEV1. Data were acquired from studies of FEV1 in late life for preterm-birth patients, former smokers with COPD, and non-smokers, through prospective testing and demographic and symptom questionnaires. Emphasis was placed on the reduction in CFTR in the lower airway compared with non-smokers, as did former smokers with COPD. There was correlation between lower airway CFTR activity and smoking, chronic bronchiectasis, and dysphonia. Thus, acquired CFTR dysfunction can have a role in COPD.