primary studies - published RCT

Impact of vitamin D supplementation on markers of inflammation in adults with cystic fibrosis hospitalized for a pulmonary exacerbation.

Code: PM22805498 **Year:** 2012 **Date:** 2015 **Author:** Grossmann RE

Study design (if review, criteria of inclusion for studies)

Randomized Trial

Participants

Forty patients with CF (17 boys and 23 girls; mean +/- SD age, 14.7 +/- 1.7 years; forced expiratory volume in 1 s, 86% +/- 18% of predicted)

Interventions

Steep ramp test (SRT) vs standard cardiopulmonary exercise test (CPET).

Outcome measures

Peak work rate (WRpeak), HRpeak, peak minute ventilation (V Epeak), and peak oxygen uptake (V O2peak).

Main results

Patients with CF attained values for absolute and relative WRpeak during the SRT of 82% +/- 14% and 92% +/- 14% of predicted. Nutritional status and degree of airway obstruction did not influence SRT performance. Significantly higher values were attained for WRpeak during the SRT compared with those during the CPET (252 +/- 60 vs 174 +/- 46 W; P

Authors' conclusions

The SRT seems to be a quick, convenient, and low-cost exercise test that is well-tolerated in patients with CF with mild-to-moderate airway obstruction. It provides an indication of exercise capacity and can potentially be used when exercise testing using gas exchange measurements is not possible.

http://dx.doi.org/10.1038/ejcn.2012.82

See also

Eur J Clin Nutr. 2012 Sep;66(9):1072-4. doi: 10.1038/ejcn.2012.82. Epub 2012 Jul 18.

Keywords

Child; Adolescent; exercise; non pharmacological intervention - devices OR physiotherapy; shuttle; non pharmacological intervention - diagn; cycle ergometer;