

Korelasi Uji Latih Jantung Paru dengan Kualitas Hidup pada Pasien PPOK Stabil di Indonesia = Correlation of Cardiopulmonary Exercise Test with Quality of Life in Stable COPD Patients Among Indonesian

Paramitha Dwi putri Saraswati, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=9999920537993&lokasi=lokal>

Abstrak

Latar Belakang: Pemeriksaan uji latih jantung paru (ULJP) telah diajukan menjadi baku emas untuk penilaian toleransi latihan pada pasien dengan penyakit paru termasuk PPOK yang secara tidak langsung memengaruhi kualitas hidup pasien. Namun perbandingan antara hasil pemeriksaan ULJP dengan aktifitas dan gejala sehari-hari pasien serta dampaknya terhadap kehidupan sosial belum banyak diteliti. Penelitian ini bertujuan untuk menilai hubungan antara kualitas hidup pasien pada PPOK menggunakan skor St. George's Respiratory Questionnaire (SGRQ) dengan parameter ULJP.

Metode: Desain penelitian ini adalah studi analitik potong lintang dengan metode pemeriksaan ULJP dan pengisian instrument SGRQ secara wawancara kepada pasien PPOK stabil yang memenuhi kriteria inklusi dan berobat di poli asma rumah sakit Persahabatan pada periode Mei 2023 – Juli 2023. Sampel penelitian diambil dengan teknik purposive sampling. Data penelitian diolah dengan analisis bivariat dengan luaran numerik.

Hasil: Didapatkan 50 subjek penelitian pasien PPOK stabil yang memenuhi kriteria inklusi. Terdapat korelasi bermakna antara parameter ULJP dengan nilai SGRQ dengan parameter VO_{2max} ($p < 0,001$, $r = -0,5$), breathing reserve (BR) ($p = 0,007$, $r = 0,4$) dan ventilasi semenit/ventilasi karbondioksida (VE/VCO_2) ($p = 0,04$, $r = 0,3$), namun tidak ada hubungan bermakna antara heart rate reserve (HRR) dan anaerobic threshold (AT) dengan nilai SGRQ. Terdapat hubungan antara nilai SGRQ dengan VEP1 ($p = 0,001$, $r = -0,5$) dan VEP1/KVP ($p = 0,02$, $r = -0,3$). Terdapat juga korelasi positif antara VO_{2max} dengan nilai VEP1 ($p < 0,001$, $r = 0,5$) dan VEP1/KVP ($p = 0,02$, $r = 0,4$). Pada analisis subgrup didapatkan perbedaan bermakna nilai VO_{2max} pada grup PPOK ($p = 0,03$), derajat obstruksi ($p = 0,02$) dan GOLD ($p = 0,01$). Terdapat juga perbedaan bermakna nilai SGRQ pada grup PPOK ($p < 0,001$), derajat obstruksi ($p = 0,04$) dan GOLD ($p = 0,001$).

Kesimpulan: Terdapat hubungan antara nilai ULJP dengan kualitas hidup pada pasien PPOK stabil yang dinilai dengan instrumen SGRQ.

.....Background: The cardiopulmonary exercise test (CPET) has been proposed to be the gold standard for the assessment of exercise tolerance in patients with lung diseases including COPD, which also indirectly affects the patient's quality of life. However, the comparison between the results of CPET examination with the patient's daily activities and symptoms and the impact on social life has not been widely studied. This study aimed to assess the relationship between ULJP and quality of life of patients in COPD using St. George's Respiratory Questionnaire (SGRQ) scores.

Methods: The design of this study is a cross-sectional analytical study with CPET examination method and

SGRQ instrument filling in interviews to stable COPD patients who meet the inclusion criteria and seek treatment at Persahabatan Hospital outpatient clinic. This study conducted in the period May 2023 – July 2023 using purposive sampling techniques. The research data was processed by bivariate analysis with numerical output.

Results: 50 study subjects of stable COPD patients who met the inclusion criteria were obtained. There was a significant correlation between CPET parameters and SGRQ values such as VO_2max parameters ($p < 0.001$, $r = -0.5$), breathing reserve (BR) ($p = 0.007$, $r = 0.4$), and minute ventilation/carbon dioxide ventilation (VE/VCO_2) values ($p = 0.04$, $r = 0.3$), but no significant relationship with heart rate reserve (HRR) and anaerobic threshold (AT). There was a correlation between SGRQ values and forced expiratory volume in one second/forced vital capacity (FEV_1/FVC) ($p = 0.02$, $r = -0.3$) and FEP1 ($p = 0.001$, $r = -0.5$). There was also a positive correlation between VO_2max with FEV_1 values ($p < 0.001$, $r = 0.5$) and FEV_1/FVC ($p = 0.02$, $r = 0.4$). In the subgroup analysis, significant differences in VO_2max values were obtained in COPD group ($p = 0.03$), degree of airways obstruction ($p = 0.02$) and GOLD ($p = 0.01$). There was also a significant differences in SGRQ values in COPD group ($p < 0.001$), degree of airways obstruction ($p = 0.04$) and in GOLD group ($p = 0.001$).

Conclusion: There was a correlation between CPET scores and quality of life in stable COPD patients assessed with the SGRQ instrument.