inflammatory markers (C-reactive protein (CRP), tumor necrosis factor (TNF), interleukin (IL)-6). Venous blood samples of glucose and insulin were taken while fasting and during OGTT. Insulin resistance was estimated with the fasting homeostasis model assessment (HOMA) index.

Results: FM, FFM and VF were not different between groups. Diabetes was diagnosed in two subjects in both groups (2hr post OGTT glucose ≥ 11.1 mmol/l). Four COPD and 1 C had impaired fasting glucose (fasting glucose 5.6–6.9 mmol/l) while 1 COPD and 2 C had impaired glucose tolerance (2hr post OGTT glucose 7.8–11.1 mmol/l). In COPD patients a negative correlation was found between the HOMA index and FEV₁ ($r^2:0.52$, $P<0.05$).

Conclusions: COPD subjects with high waist circumference are similar to control subjects in term of FFM and FM, level of systemic inflammation and response to OGTT. In COPD, the severity of the disease is associated with an insulin resistance that may potentiate the risk for the development of type 2 diabetes in these patients.

Assessment of Two Training Modalities Effects on Exercise Tolerance after a Cardiac Rehabilitation Program and 3 Months Later in Off-Pump Coronary Artery Bypass Patients

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Background. Physical training is recommended as an efficient therapy in patients with coronary disease. However its effects should depend on its modalities. The aim of this study was to compare the effects of continuous and interval training after off-pump coronary artery bypass surgery (CABG).

Methods. Twenty-three male patients (59.5 ± 1.2 yr) underwent a randomized physical training using con-

tinuous (C, $n=10$) or interval (IT, $n=13$) modalities, over 3 weeks (5 h. a week). All patients performed a symptom-limited exercise test with measurements of ventilatory threshold (VT) and peak workload (WL), oxygen uptake (VO₂) and heart rate (HR), before, at the end and 3 months after the training period. They also completed the SF-36 questionnaire to assess their quality of life.

Results. Both C and IT improved WL and VO₂ at VT ($P<0.05$) and at peak exercise ($P<0.05$). Only IT increased peak HR and HR reserve ($P<0.01$). In both groups quality of life was improved ($P<0.05$). In both groups, compared to after training, the 3-months assessment showed an increase in peak and ventilatory threshold WL, and in peak HR ($P<0.05$) without any change in peak VO₂ and VT HR. No difference was observed between groups whatever the period studied. Back to home, in accordance with the given recommendations, most of the patients carried on their physical training over 3 months. They performed either outside walking ($n=9$) or cycling sessions ($n=1$) or both activities ($n=11$). No difference concerning the global training schedule was noted regardless their group (5.4 ± 1.2 vs. 6.0 ± 1.1 h.week⁻¹ for C and IT, respectively).

Conclusions. In off-pump CABG patients, similar improvements of exercise capacity and quality of life perception were observed after both C and IT programs. Only peak HR was increased after interval training. Thus, IT is a good alternative to C training in this population. Aerobic fitness still remained stable or increased after 3 months of individual practice which duration exceeded the minimal values recommended.

The Effect of Pulmonary Rehabilitation on Pedometer-Measured Physical Activity

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Background: Pulmonary rehabilitation results in favorable outcomes across multiple areas, including exercise capacity, dyspnea, and health status. The effectiveness of this intervention on increasing physical