SMOKING CESSATION, PULMONARY REHABILITATION AND QUALITY OF LIFE AT SMOKERS WITH COPD

Paraschiva Postolache¹, Roxana-Maria Nemeș²*, O. Petrescu¹, Ingrid-Olga Merişanu³

University of Medicine and Pharmacy “Grigore T. Popa” – Iași
Faculty of Medicine
1. Department of Medical Specialties (I)
Pulmonary Rehabilitation Clinic, Rehabilitation Clinic Hospital, Iași
2. Institute of Pneumology “Marius Nasta”, Bucharest
3. BMI Rosshall Hospital, Glasgow, Scotland
*Corresponding author. E-mail: roxa.nemes@gmail.com

SMOKING CESSATION, PULMONARY REHABILITATION AND QUALITY OF LIFE AT SMOKERS WITH COPD (Abstract): **Aim** was to compare the quality of life (QoL) at the smokers with COPD who quit smoking and have completed a pulmonary rehabilitation program with those who received usual treatment. **Material and Methods:** 437 smokers with COPD stages II and III were counseled and treated to smoking cessation and completed COPD Assessment Test (CAT) at the beginning and at the end of 12 weeks of treatment. 113 patients were enrolled in a 12 weeks supervised pulmonary rehabilitation program (PR group) and 324 smokers received usual treatment for COPD and were monitored for 12 weeks (non-PR group). The initial HbCO > 2%, and every patient completed an initial CAT. **Results:** Initially, CAT scores varied between 26 and 38. At the end of the period, CAT scores in the PR group were between 7 and 16 and in the non-PR group CAT scores were between 20 and 26, and additionally the smoking cessation failure at an important number of non-PR members (45.98%) (in PR group, 16.81%). There were reported as well higher rates of long-term abstinence in the adherent patients to PR than the other group. **Conclusions:** COPD smokers who completed the PR presented important QoL improvements, better CAT score than COPD smokers usually treated. A better PR adherence seems to be related with higher rates of sustained long term abstinence. **Keywords:** COPD, SMOKING CESSATION, PULMONARY REHABILITATION, CAT.

Smokers included in pulmonary rehabilitation (PR) is an often debate, considering PR a real aid to smoking cessation and improving the quality of smokers life. PR is an integral part of the clinical management and health maintenance of those patients with chronic respiratory disease who remain symptomatic or continue to have decreased function despite standard medical treatment. PR aims to reduce symptoms, decrease disability, increase participation in physical and social activities, and improve the overall quality of life (QoL) for patients with chronic respiratory disease (1, 2, 3, 4, 5, 6).

The COPD Assessment Test (CAT) is a new questionnaire for people with Chronic Obstructive Pulmonary Disease (COPD). It’s designed to measure the impact of the condition on a person’s life, and how this
changes over time. The CAT is very simple to administer, and aims to help doctors and nurses better manage a patient’s COPD. The CAT is a short, simple and validated assessment, which measures the impact of COPD on a patient’s life in an objective manner (7, 8).

The objective of this study was to compare the improvement of quality of life, evaluated through CAT, between smokers with COPD who completed a PR program complementary of the smoking cessation treatment and those who received usual treatment.

MATERIAL AND METHODS
Data were obtained from the database of Smoking Cessation Center, Rehabilitation Clinical Hospital, Iasi, Romania.

Inclusion criteria were:
1) evidence of COPD according to GOLD standards (2010) (9);
2) an initial HbCO > 2%, that suggests active smoking status (10);
3) an initial COPD Assessment Test (CAT) completed by every patient.

From 437 smokers who presented at the Smoking Cessation Center between January 1 and September 1, 2011, were diagnosed with COPD stages II and III (GOLD 2010), only 113 patients (25.8%) were enrolled in a 12 weeks supervised PR program, complementary the smoking cessation treatment (PR group), and 324 smokers (74.1%) received usual treatment for COPD in addition the treatment for stop smoking, monitored as well for 12 weeks (non-PR group). All patients completed the CAT questionnaire at the beginning and at the end of the determined period.

Initially, CAT mean scores of smokers with COPD were 26.84 in stage II and 30.98 in stage III and finally decreased to 10.32 and 13.95. At the end of the 12 weeks treatment period.
weeks period, the CAT scores variations in the PR group were between 6-16 in COPD II patients and 7-16 in COPD III ones, comparing to the non-PR group, where CAT scores shown little improvements since the beginning of the treatment, with values between 20-26 (fig. 1), additionally to smoking cessation failure at an important number of non-PR members (45.98%) than the PR group (16.81%). There were reported as well higher rates of short and long-term abstinence at the adherent patients to PR than the other group.

**Fig. 1.** CAT scores distribution by COPD stages in PR group and non-PR group

**CONCLUSIONS**

Although current smokers are often expected to have a small PR adherence even they intend to stop smoking, COPD smokers who completed the PR presented important QoL improvements, better CAT score than COPD smokers usually treated. Moreover, a better PR adherence seems to be related with higher rates of sustained long term abstinence.

**REFERENCES**

Paraschiva Postolache et al.


---

**NEWS**

**POLIO PUZZLE AT THE BEGINNING OF 2015**

Polio eradication is a very expensive campaign since 1988. In January, Ministers of Health worldwide convened at WHO’s Executive Board meeting, to set global public health policies. Among other topics, representatives reviewed the current polio epidemiology and global preparedness plans for the phased removal of oral polio vaccines. The first wild poliovirus type 1 (WPV1) case of 2015 is reported this week, from Pakistan. The case had onset of paralysis on 3 January, from Khyber Pakhtunkhwa. A total number of 6 cases of polio with wild virus were confirmed in Pakistan until 4 February 2015. Afghanistan: no new WPV1 cases have been reported in the past weeks and the most recent case had onset of paralysis on 4 December 2014. Nigeria’s total WPV1 case count for 2014 remains 6, compared to 53 in 2013. In Nigeria, the Expert Review Committee on Polio Eradication and Routine Immunization met last month to discuss aggressive strategies to urgently eradicate both wild- and vaccine-derived polioviruses in the country as rapidly as possible. National Immunization Days NIDs are planned in Cameroon in January using trivalent oral polio vaccine (OPV) and in Cameroon, Chad, and Gabon in February using bivalent OPV. Subnational Immunization Days SNIDs are planned in the Central African Republic in February and in Angola, Cameroon, the Central African Republic and the Democratic Republic of the Congo in March. The total number of cases that were reported in the Horn of Africa in 2014 was 6: 1 WPV1 in Ethiopia and 5 WPV1s in Somalia. Three cases of WPV1 were reported in the Middle East in 2014 2 in Iraq and 1 in Syria. Even as polio programme staff across West Africa support efforts to control the Ebola outbreak affecting the region, efforts are being made in those countries not affected by Ebola to vaccinate children against polio to create a buffer zone surrounding the Ebola affected countries. The Ebola crisis in western Africa continues to have an impact on the implementation of polio eradication activities in Liberia, Guinea and Sierra Leone. The Polio Eradication and Endgame Strategic Plan 2013–2018 is a comprehensive, long-term strategy that addresses what is needed to deliver a polio-free world by 2018. (WHO. Global polio eradication initiative, 2015).

*Alina Manole*