SMOKING CESSATION AND BODY WEIGHT

Maria Caterina Grassi*, Domenico Enea**, Rosanna Marchetti**, Flavia Temperilli***, Francesca Villarosa***, Paolo Nencini *, Massimo Cuzzolaro ***

*Department of Human Physiology “V.Erspamer”, **Centro Policlinico Senza Fumo, ***Department of Clinical Medicine, “Sapienza” University of Rome, Italy

A great attention is presently paid to Smoking Cessation (SC) and pharmacotherapy combined with counseling has been found to achieve the highest rate of SC. SC is associated with weight gain and this may reduce compliance in a subset of smokers. The aim of the present study is to evaluate the effects of SC on body weight during a 1-year follow-up period. From January 2001 to December 2005, 587 volunteers (263 males and 324 females) who wanted to quit smoking were recruited by our unit. After an individual motivational interview subjects started a Six-week Group Counseling Program (SGCP) for SC and were asked to begin a seven-week Bupropion Therapy (BT). Prior to admission to SGCP subjects were submitted to a physical examination and underwent a structured interview about their smoking history. Some psychometric instruments were administered: the Fagerström Tolerance Questionnaire, the Severity of Dependence Scale and the Three Factor Eating Questionnaire. Counselors called in subjects after 3, 6 and 12 months to check their current smoking habit and body weight. Of the 229 subjects who accepted BT only 115 subjects completed the seven-week cycle of therapy (BT-COMP group) whereas the remaining 114 subjects discontinued medication (BT-NONCOMP group) but continued to attend SGCP. According to a previous report (1) BT groups achieved a higher abstinence rate if compared to the sole SGCP. At the 1-year follow-up abstinence rates were 65.4% and 47.4% in BT-COMP and BT-NONCOMP groups, whereas 39.7% was the quit rate of the SGCP sole group. We evaluated the increasing body weight in the three groups of subjects (SGCP only, BT-COMP e BT-NONCOMP) according to gender and to the results of the 1-year abstinence. Subjects who did Not Smoke after 1-year (NonS) are compared with those who were still Smokers (S). Females and males NonS revealed at 1-year follow-up a weight gain (¯x: 2.9 kg and 3.1 kg, respectively) significantly higher if compared with S of the same sex (¯x: 0.2 kg and -0.1 kg, respectively). Several studies have shown that many people believe that smoking helps control weight and ex-smokers risk weight gain. This widespread opinion contributes to making difficult to quit this dangerous habit. Eating more food, particularly more sweet food, and a decrease in metabolic rate are the main causes. Our data suggest that BT is not a protective factor in increasing body weight. Regular aerobic exercise and nutritional counseling may be helpful to minimize weight gain after quitting smoking. Psychometric measures seem to be weak predictors of weight gain.