

Coronary Revascularization Does Not Impact Smoking Cessation in Patients Following an Acute Coronary Syndrome

Sonia Grandi¹, Andre Gervais³, Lawrence Joseph⁴, Jennifer O'Loughlin⁵, Gilles Paradis⁶, Louise Pilote⁷, Stephane Rinfret⁸, Mark Eisenberg²

¹ *Clinical Epidemiology and Community Studies, SMBD Jewish General Hospital/ McGill University,* ² *Cardiology and Clinical Epidemiology, SMBD Jewish General Hospital/ McGill University,* ³ *Direction du Sante Publique,* ⁴ *Epidemiology, Biostatistics, and Occupational Health, Clinical Epidemiology, McGill University Health Centre,* ⁵ *Social and Preventative Medicine, University of Montreal,* ⁶ *Epidemiology, Biostatistics, and Occupational Health, McGill University,* ⁷ *Internal Medicine and Epidemiology, Biostatistics, and Occupational Health, McGill University Health Centre, Montreal,* ⁸ *Cardiology, Hopital Laval, Quebec, Canada*

Background: Many smokers who suffer an enzyme-positive acute coronary syndrome (ACS) are revascularized (PCI/ CABG) during hospitalization. However, the effect of undergoing revascularization on smoking behavior in these patients is unknown.

Methods: We examined the efficacy of bupropion in smokers following an ACS in an ongoing double-blind, placebo-controlled randomized clinical trial (RCT). Smoking status was determined by self reports and biochemically-validated carbon monoxide (CO) readings at weeks 4, 9, 24, and 52. Smoking status was defined by CO readings <10 ppm and no cigarettes smoked in the week prior to clinic visits.

Results: At the time of analysis, 52-week follow-up data were available for 90 revascularized patients and 75 medically-treated patients. There were no significant differences in baseline characteristics (including smoking behavior) between the two groups. Among patients who returned for follow-up, the proportion of patients who were smoking was 45% and 48%, in the revascularized and medically-treated patients, respectively. Similar to previous RCTs, the lost to follow-up rate was 33% among revascularized patients and 26% in those treated with medical therapy. When patients lost to follow-up were treated as smokers, the proportion of patients smoking at 52-weeks was 62% among both revascularized patients and medically-treated patients (Figure).

Conclusions: Undergoing revascularization following ACS does not appear to have an effect on the likelihood of quitting smoking at 52 weeks. Because the trial is on-going and treatment is still blinded, actual smoking rates in untreated patients are likely to be even worse than reported here.

