Implementation of Primary and Secondary Prevention Measures in Patients Following Acute Coronary Syndromes

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Despite primary and secondary methods for the prevention of acute coronary syndromes, there is still poor patient and physician understanding of the importance of smoking cessation. Cardiovascular risk decreases significantly after smoking cessation, however, there is a paucity of counseling programs regarding this issue after hospitalization. Such programs have proved to be cost effective and should be provided as standard care.

Similarly there is abundant clinical evidence that lowering of LDL cholesterol is of paramount importance in secondary prevention. Most recent clinical trials have extended the benefits of lipid lowering drugs (HMG-CoA reductase inhibitors) to individuals without known atherosclerotic disease and with average levels of cholesterol. While the current Adult Treatment Panel III defines optimal LDL cholesterol as below 100 mg/dL, the optimal plasma levels for achieving the lowest cardiovascular risk may be considerably lower. Because drug therapy will almost certainly prove neither cost effective nor medically appropriate in primary prevention, especially in younger populations, intensive life-style modification should become a society priority. However, even medically treated patients under physician's guidance do not reach the aforementioned levels.

We examined 88 patients who suffered from an acute coronary syndrome from January to March of 2007 and had a telephone or personal contact to determine their smoking status and total cholesterol and LDL levels. The study included 11 women and 77 men, with average age of 62.5 years (range, 24-80 years). Forty two patients were smokers and 79 were dyslipidaimic with or without statin therapy (75 vs 13). Patients over 80 years old were excluded. After one year follow up, 6 patients died (50% of them were smokers). In the smokers group, 54% of had quit smoking after one year (21 patients), 3% of patients were on statin therapy (n=76) and 64% (n=53) reached plasma LDL value<100mg/dl.

In conclusion the current strategy of cardiovascular risk modification to prevent a new acute coronary syndrome is far away from the national published guidelines.