intervention measures for LDL, HDL, triglycerides, total cholesterol, and adherence and quality-of-life. A random-effects meta-analysis combined data between pharmacist-intervention and standard-care groups. Chi-square tested heterogeneity of effects. Publication bias was assessed using funnel plots and Egger-Mazumdar statistic. RESULTS: Fifty-one studies were found; 22 met inclusion/exclusion criteria. Study settings included medical clinic/center (n=11), community pharmacy (n=8), hospital (n=2) and patient homes (n=1). Patient education (77%) and medication management (73%) were most common interventions. The average patient follow-up period was 9.8 ± 6.4 months. Quality of pharmacist-intervention studies was considered “fair” (65%, SD = 6.6%). Total cholesterol was significantly reduced from baseline (34.3 ± 10.3 mg/dL, p < 0.001) and also significantly above control groups (22.0 ± 10.4 mg/dL, p = 0.034). LDL was reduced significantly from baseline (38.6 ± 12.4 mg/dL, p = 0.002); but not significantly more than controls (22.1 ± 12.0 mg/dL, p = 0.065). A clinically relevant but not statistically significant reduction in triglycerides was found. Patients’ adherence to pharmacotherapeutic regimens (3/9 studies reported significant results after pharmacists’ interventions) and quality of life (2/2 significant) were considered possibly not sensitive and possibly sensitive to pharmacist interventions, respectively. CONCLUSION: Total cholesterol is sensitive to pharmacist’s interventions while LDL and triglycerides levels are possibly sensitive to those interventions. Further research should evaluate specific determinants of pharmacist-sensitive outcomes.

ROLE OF OSTEOPROTEGERIN AND RANKL IN BONE AND VASCULAR CALCIFICATION

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OBJECTIVE: New members of the TNF-signaling superfamily, osteoprotegerin (OPG) and receptor activator of nuclear factor-kB ligand (RANKL), are thought to play an important role in vascular calcification and bone remodeling and might represent the molecular link between arterial calcification and bone resorption. The purpose of this study was to determine whether OPG and/or RANKL mediate the observed association between coronary and bone calcification in postmenopausal women. METHODS: Among the members of the Rancho Bernardo longitudinal study, 92 postmenopausal women (aged 58–81 years) taking estrogen therapy (ET) who underwent assessment of bone mineral density (BMD) and coronary artery calcification (CAC) and had serum OPG and RANKL levels measured between 1998–2002 are the basis of this report. RESULTS: Neither OPG nor RANKL levels varied among subjects with and without CAC in multivariate analysis. Increase in BMD at the hip was associated with decrease in CAC (OR = 0.52; 95% CI: 0.29–0.93) independent of age, fat-free mass, HDL cholesterol, current smoking, and use of cholesterol-lowering medications. Other skeletal sites demonstrated a similar pattern. Addition of RANKL and/or OPG in the model had minimal effect on the magnitude or statistical significance of the BMD-CAC association. Additionally, a test of interaction indicated that RANKL and OPG are not significant effect modifiers of the association. CONCLUSION: Serum OPG and RANKL do not account for the observed association between bone and coronary artery calcification among postmenopausal women using ET.

BLOOD PRESSURE SUCCESS ZONE LONGITUDINAL STUDY OF SUCCESS (BPSZ-BLISS). AN OBSERVATIONAL MULTI-CENTER STUDY OF THE IMPACT OF THE BPSZ EDUCATIONAL PROGRAM ON BLOOD PRESSURE CONTROL, PERSISTENCE, COMPLIANCE, AND TREATMENT SATISFACTION. ENROLLMENT METRICS AND BASELINE COHORT CHARACTERISTICS

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OBJECTIVE: The Blood Pressure Success Zone (BPSZ) Program is a nationwide initiative which provides blood pressure management education to hypertensive patients and a complimentary trial of antihypertensive medications. The BPSZ-BLISS (Longitudinal Observational Study of Success) is an observational study to evaluate BPSZ program effectiveness on blood pressure (BP) control, compliance, persistence and treatment satisfaction.
BPSZ-BLISS is naturalistic and designed to obtain outcomes from patients with high non-HDL cholesterol. METHODS: A naturalistic cohort study of patients with high non-HDL cholesterol, treated with a fixed-dose extended release niacin/simvastatin (ERN/S) combination had significant improvements in non-HDL-C, HDL-C, and triglyceride levels when compared to patients treated with simvastatin therapy alone. Age, sex, and coronary risk-factor data for patients with CHD and non-HDL-C cholesterol >130 mg/dl were obtained from 1999–2002 NHANES. The drugs of interest included simvastatin alone and ERN/S. The scenarios of interest reflected increased the dose of simvastatin or adding ERN to simvastatin. RESULTS: We estimated that 1741 CHD events would occur over five years among 10,000 patients treated with 20 mg of simvastatin. The number of CHD events would decrease by 8.9% with 1000/20 mg of ERN/S. Relative to a maximum dose of 80 mg of simvastatin, intermediate (1000/40 mg) and maximum doses (2000/40 mg) of ERN/S would reduce CHD events by 4.9 and 11.1 percentage points, respectively. CONCLUSION: Based on this FHS risk model for a secondary prevention population with elevated non-HDL cholesterol, intensifying lipid-modifying therapy with selected fixed-dose ERN/S combinations may reduce the number of CHD events relative to the use of simvastatin monotherapy. Confirmation of the predicted clinical events of the fixed-dose combination in a secondary prevention patient population would be useful.

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EFFECTS OF INTENSIFYING LIPID-ALTERING THERAPY ON CHD EVENTS IN A SECONDARY PREVENTION POPULATION WITH HIGH NON-HDL CHOLESTEROL

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OBJECTIVE: Many patients with dyslipidemia fail to reach treatment goals on the lowest dose of a single drug. We assessed the effects of intensified lipid-modifying therapies on the expected rates of coronary events among a cohort of 10,000 people aged 50+ years with established CHD and high non-HDL-cholesterol levels. METHODS: This model-based analysis used data from the recent SEACOAST clinical trial and a published equation for secondary prevention of CHD from the Framingham Heart Study (FHS), based on the total-cholesterol/HDL-C ratio, to calculate the expected number of CHD events over five years. Findings from the SEACOAST trial showed that patients treated with a fixed-dose extended release niacin/simvastatin (ERN/S) combination had significant improvements in non-HDL-C, HDL-C, and triglyceride levels when compared to patients treated with simvastatin therapy alone. Age, sex, and coronary risk-factor data for patients with CHD and non-HDL-C cholesterol >130 mg/dl were obtained from 1999–2002 NHANES. The drugs of interest included simvastatin alone and ERN/S. The scenarios of interest reflected increased the dose of simvastatin or adding ERN to simvastatin. RESULTS: We estimated that 1741 CHD events would occur over five years among 10,000 patients treated with 20 mg of simvastatin. The number of CHD events would decrease by 8.9% with 1000/20 mg of ERN/S. Relative to a maximum dose of 80 mg of simvastatin, intermediate (1000/40 mg) and maximum doses (2000/40 mg) of ERN/S would reduce CHD events by 4.9 and 11.1 percentage points, respectively. CONCLUSION: Based on this FHS risk model for a secondary prevention population with elevated non-HDL cholesterol, intensifying lipid-modifying therapy with selected fixed-dose ERN/S combinations may reduce the number of CHD events relative to the use of simvastatin monotherapy. Confirmation of the predicted clinical events of the fixed-dose combination in a secondary prevention patient population would be useful.