

3275 Is wine ethanol noxious in patients with established coronary heart disease following either a Mediterranean or a Western type of diet?

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Moderate alcohol intake is associated with a reduced rate of coronary heart disease (CHD) in patients (pts) without prior CHD (primary prevention). This is attributed to effects on HDL cholesterol (C) and hemostasis (platelet function). Data in secondary prevention (in pts with established CHD) are however limited.

Methods: We studied individual relationships between CHD risk factors and alcohol intake (as percent of total energy during the preceding 24 hours) in 256 male CHD pts randomized in the Lyon Diet Heart Study, a secondary prevention trial testing whether a Mediterranean (Med) type diet may reduce the rate of CHD recurrences compared with a Western (West) type of diet.

Results: Progressive alcohol intake was associated with linear increase in total C ($r = +0.23$, $p = 0.0003$), triglyc ($r = +0.17$, $p = 0.008$), LDL-C ($r = +0.16$, $p = 0.01$), HDL-C ($r = +0.15$, $p = 0.01$) whereas the effects on blood pressure (diastolic: $r = +0.12$, systolic: $r = +0.11$; both $p = 0.06$) and ADP-induced platelet aggregation ($r = -0.10$, $p = 0.10$) were borderline non significant.

Separate analyses of Med ($n = 129$) and West ($n = 127$) pts indicated no significant effect of alcohol in Med pts (apart from total C: $r = +0.19$, $p = 0.03$). In contrast, in West pts, total C ($r = +0.26$, $p = 0.002$), triglyc ($r = +0.21$, $p = 0.02$), LDL-C ($r = +0.19$, $p = 0.04$) and platelet aggregation ($r = -0.23$, $p = 0.01$) but not HDL-C ($r = +0.16$, $p = 0.08$) were still significantly associated with alcohol. In these French pts, more than 90% of the consumed alcohol was wine ethanol.

Conclusions: 1) the metabolic effects of alcohol in pts with established CHD are quite different from those reported in non CHD pts and may partly explain why they were not protected. 2) dietary habits are strong modulators of the effects of alcohol in CHD pts, potentially noxious effects being much more evident in pts following the Western rather than the Med type of diet. 3) although a protective effect of some non-alcohol components of wine cannot be excluded, these data suggest that in CHD pts (in secondary prevention), alcohol consumption, including wine, should not be encouraged.

3276 A new combination regimen in patients with refractory mixed hyperlipidaemia: alternate day therapy

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Objective: Combination therapy is routinely used to achieve improved lipid reduction in mixed hyperlipidaemia (MH) refractory to monotherapy. The aim of this study was to investigate the effect of a new combination regimen on total cholesterol (TC), triglycerides (TG), low-density lipoprotein cholesterol (LDL-C), high-density lipoprotein cholesterol (HDL-C) and apoproteins (Apo) A1 and B in patients (pts) with refractory MH.

Methods: Fifty-one pts (27 males and 24 females) with a mean age of 54 ± 8 years, were studied for 6 months. Pts, constantly under hypolipidemic diet, were randomised into two groups. Group A consisted of 24 pts receiving simvastatin (S) 10 mg and fenofibrate (F) 250 mg everyday, Group B consisted of 27 pts receiving S 10 mg and F 250 mg alternate daily. Serum lipid profiles, whole blood counts, urine and blood chemistry analysis were followed during the therapy. At the end of 6 months, side effects and efficacy were evaluated.

Results: Both regimens showed similar effects on blood lipid parameters. There were statistically significant reductions in the serum levels of TC (Group A -31% and Group B -32%), TG (-56% and -55%), LDL-C (-37% and -38%), and Apo B (-23% and -22%) ($p < 0.0001$), and elevations of HDL-C ($+15\%$ and $+13\%$), and Apo A1 ($+7\%$ and $+5\%$) levels in both groups ($p < 0.05$). No pts exhibited myopathy with either regimens. In Group A, 3 pts, (12.5%) showed severe creatine kinase (CK) increase leading to cessation of therapy and 5 pts (19%) showed moderate increase in transaminase values (less than 3 fold of upper normal limit). In the alternate regimen there were no significant differences in liver biochemistry or CK levels.

Conclusion: Alternate S-F day therapy is as effective as frequently used combined therapy and is also safer, more cost-effective and more tolerable.

3277 Twelve years of public screening for cardiovascular risk factors in Vorarlberg/Austria

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Context: Screening for obesity, hyperlipidemia, hypertension and hyperglycemia has shown to be effective in the prevention of cardiovascular diseases. We therefore initiated a public screening program in 1973 and adapted the program to its present form in 1985.

Objective: To analyse changes in participation and outcome of a public screening program from 1985 to 1996.

Design: Descriptive epidemiological study, year by year comparison. Setting: Vorarlberg, Austria, 1985 to 1996.

Participants: Self selected sample of an annual average of 25020 Caucasians with informed consent, age 25 to 64 years. 300026 measurements of 114279 participants, representing 73.5% of the female and 61% of the male population.

Main Outcome Measures: Obesity (body-mass-index >27.8 for men and >27.3 for women), hypertension (systolic blood pressure >160 mmHg or diastolic blood pressure >90 mmHg), hypercholesterolemia (total cholesterol >250 mg/dl), hypertriglyceremia (triglyceride >200 mg/dl), hyperglycemia (glucose >115 mg/dl) from 1989, current smoking.

Results: Prevalence of obesity increased almost linearly from 21.7% (1985) to 25.9% (1996) in women and 20.5% (1985) to 25.8% (1996) in men (Odds Ratio = 1.25, 95% Confidence Interval 1.20–1.31, effect of 1996 compared to 1985, adjusted for age and sex). Hypertension did not change significantly (OR = 0.95, 95%CI 0.90–1.01). Prevalences varied from 12.0% to 13.3% in women and 15.1% to 16.8% in men. Hypercholesterolemia decreased from 28% (1985) to 20.7% (1996) in women and 33.9% to 24.6% in men (OR = 0.59, 95%CI 0.57–0.62). Hypertriglyceremia from 8.8% to 7.9% in women and 25.9% to 21.4% in men (OR = 0.80, 95%CI 0.76–0.84). Hyperglycemia raised considerably in men from 4.6% (1989) to 6.7% (1996), in women from 3.3% to 4.3% (OR = 1.35 95%CI 1.25–1.47). In 1985 25.6% of the men reported to be current smokers, in 1996 only 18.3%. The rate in women decreased from 15.6% to 13.8% (OR = 0.77, 95%CI 0.73–0.81). Combinations of two or more risk factors did not differ significantly (OR = 1.03, 95%CI 0.98–1.07) and varied from 20.1% to 22.2% in women and 31.2% to 32.9% in men (comparison 1989 to 1996).

Conclusions: Reductions in blood lipid levels and smoking prevalence seem to reflect positively the improving efforts in cardiovascular disease prevention over the last decade, whereas an intensification of public health measures against increasing obesity and hyperglycemia is necessary to prevent future diseases successfully.

PACING FOR HEART FAILURE

3290 How many patients are eligible for multisite pacing in severe heart failure?

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The role of pacemaker therapy for the treatment of heart failure has been discussed since 1990. Promising results have been published for biventricular pacing with optimization of AV-delay in patients with severe heart failure (NYHA \geq III) and prolonged QRS-duration (0.12 s).

Retrospectively, we analysed how many patients (pts) in a heart failure/heart transplant program would be eligible for biventricular pacing with AV-delay-optimization. Age, sex, underlying heart disease, concomitant disease, ECG-criteria and rhythm disorders of 271 patients were documented. All patients had been referred for evaluation of heart transplantation after at least one episode with severe cardiac decompensation and/or severely impaired LV-function.

57% of 271 pts (21% female, mean age 54.2 ± 22.3 years) had dilated cardiomyopathy and 35% had coronary artery disease. Pts with other underlying diseases (mostly acquired valve disease or congenital heart disease) were excluded from further analysis as no results concerning multisite pacing are available for these pts. Of the remaining 253 pts 14 pts underwent heart transplantation during the next 6 months, 4 pts had conventional heart surgery and 7 pts. died. Of the remaining 231 pts 106 pts had a QRS-width ≤ 0.12 s and 23 pts were constantly paced via an implanted pacemaker or ICD. 34/102 pts with QRS > 0.12 s remained in NYHA functional class \geq III despite optimally tailored medical therapy. 16 of these 34 pts had atrial fibrillation and/or ventricular tachycardia. The remaining 18 patients (6.6%) would be eligible for multisite pacing.

Thus, according to the indications discussed currently only a minority of pts is eligible for multisite pacing to treat heart failure. If an ICD with the possibility of biventricular pacing was available and biventricular pacing alone without AV-delay-optimization was beneficial in pts with atrial fibrillation this therapy could be offered to approx. 13% of pts referred for evaluation of heart transplantation.