

## President's Message

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### PREVENTION OF CORONARY HEART DISEASE

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The following president message is a summary of a review I finished writing under the same title "Prevention of Coronary Heart disease (CHD)".

CHD is a common disorder and possibly the main reason for cardiologist visits and a main cause of morbidity and mortality.

CHD include a range of clinical disorders from asymptomatic atherosclerosis and stable angina to acute coronary syndromes (unstable angina, NSTEMI, STEMI).

In USA and the UK mortality rates due to CHD is decreasing through lifestyle changes and drugs. While in developing countries there is an increasing trend in mortality

CHD prevention is possible and is cost effective. Half of adults have at least one cardiovascular risk factor which are mostly undiagnosed. Healthful life style habits that do not permit the appearance of risk factors is the preferred method for prevention of CHD.

The WHO reported that ischemic heart disease was responsible for approximately nine million deaths in 2016.

**Smoking** cessation is important and its beneficial effect appears early after stopping smoking. Smoking appears to contribute to the generation of atherosclerotic plaques.

**Weight Reduction** in obese and over weight subjects ( body mass index  $>25$  kg/m<sup>2</sup>) through both dietary and lifestyle changes. Weight loss can improve lipid profile, reduce BP and improve glycemic control.

A realistic target of weight reduction is 5-10% weekly weight loss of original weight.

Pharmacologic treatment should be considered only after dietary advice, exercise and behavioral approaches have been started.

### **Dietary approaches**

The vegetarians experienced significantly less ischemic heart disease mortality than the non- vegetarian: CHD death rate in the non-meat eaters was around 25 % lower than in the meat eaters. It is recommended to replace butter and hard margarine with polyunsaturated margarine and full fat with skimmed milk and eat more fish, fiber rich foods, fresh fruit and vegetables.

Coronary angiography showed significant overall regression of coronary atheroma in an experimental group with very low fat vegetarian diet.

### **Physical exercise**

People who exercise adequately have a reduced risk of CHD. The minimum exercise required to improve fitness is brisk walking for at least 20 minutes twice a week. Benefit can be obtained from less vigorous exercise in older people.

### **Coping with psychic stress and depression**

Depression significantly increases the risk of CHD. Combined treatment with antidepressants and psychotherapy is recommended as first line treatment for patients with severe major depressive disorder.

Selective serotonin reuptake inhibitors (SSRIs) are the most commonly prescribed antidepressants.

### **Drugs for primary prevention**

Statins lower LDL-Cholesterol with clinical benefit for CHD mortality and for all-cause mortality. The level of LDL-C and the presence of CV risk factors determine the need for statins in primary prevention.

Aspirin (75-100 mg/day) is indicated in all patients with prior CV event and for primary prevention in patients 50 years or older and have high risk and in

patients with diabetes mellitus, 40 years or older and have additional risk factors. New clinical trials suggest a reduced benefit of aspirin for preventing first CVD events.

**Conclusion:**

Prevention of CHD is possible and cost effective. Nationwide awareness programs addressing both public and medical community are needed. These include CV risk factors prevention and treatment. Healthy lifestyle is the core of the prevention program. Cessation smoking, body weight reduction in obese, physical exercise and a healthy diet are the cornerstone for CHD prevention in addition to treatment of cardiovascular risk factors.