

OVERVIEW OF HYPERLIPIDEMIA AND CME COURSE

A/Prof Goh Lee Gan

INTRODUCTION

The National Health Surveillance Survey conducted in 2001 and just released has four key points on the state of “reported high blood cholesterol” in the population (MOH, 2003). They are:

- κ About 1 in 20 (4.6%) Singapore residents aged 18 years and above reported that they had been told by a doctor that they had high blood cholesterol
- κ Males (5.0%) had a higher prevalence of reported high blood cholesterol compared with females (4.3%)
- κ Indians had the highest prevalence of reported high blood cholesterol (5.6%), followed by Chinese (4.7%) and Malays (3.6%)
- κ The elderly aged 65 to 74 years had the highest prevalence of reported high blood cholesterol (16.3%).

HYPERLIPIDEMIA AS A CARDIOVASCULAR RISK

High blood cholesterol can cause atherosclerosis – the narrowing of arterial walls due to deposits of cholesterol. Such occurrence in the coronary vessels results in ischaemic heart disease. The risk of developing atherosclerosis or heart disease increases as the level of blood cholesterol increases.

There is a case to be made to reduce hyperlipidemia in the population. In 2002, of the 15,820 deaths in Singapore, ischaemic heart disease and other heart disease ranked second place in the top ten causes of death. This cause of death accounted for 24.2% of all deaths. Reducing hyperlipidemia has no doubt help to save many who now die of ischaemic heart disease.

The lowering of hyperlipidemia requires the synergy of the doctor, patient, healthcare delivery system and socio-economic system. There is a need for awareness of all that all efforts to reduce hyperlipidemia individually and in the whole nation is worth the energies devoted to achieve this, that the consequences of not doing this is serious, that effective strategies are available, and there are barriers too. These barriers can be behavioural, economic and also social. Helping each patient dismantle the barriers that stand in the way of lipid level control is more than just telling the patient the cold facts. The ability to inform, counsel, and motivate each patient to do his or her best are skills we need, as healthcare providers to bring to the consulting room.

In this CME course, the lowering of lipid levels to reduce risks to coronary heart disease (CHD) is through therapeutic lifestyle changes (TLC) approach and lipid lowering agents is dealt with. The details of this CME course follow:-

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CME COURSE ON HYPERLIPIDEMIA OCTOBER 2003

Course components and CME points

The CME Course on hyperlipidemia is made up of the following components. You can choose to participate in one or more parts of it. The CME points that will be awarded are also indicated.

- κ Distance learning course – 6 units (see below) – each unit 1 CME point
- κ Seminars – 2 seminars – each 2 CME points
- κ Workshop – 2 CME points
- κ Reading papers on hyperlipidemia – 10 – each 1 CME point up to 5 points maximum for the whole CME year.

Distance learning course

- Unit 1: Epidemiology of Hyperlipidemia
- Unit 2: Review of Evidence on the Efficacy of Treatment
- Unit 3: Screening and Classification of Hyperlipidemia
- Unit 4: Coronary Heart Disease Risk Assessment
- Unit 5: Pharmacological Treatment of Hyperlipidemia
- Unit 6: Non-pharmacological Treatment of Hyperlipidemia

Unit 1

Epidemiology of Hyperlipidemia

- Disease Burden
- Pathophysiology of Hyperlipidemia
- Epidemiological Evidence
- Framingham Study
- Multiple Risk Factor Intervention Trial
- CHD Risk Factor in Singapore
- Diabetes mellitus.

Unit 2

Review of Evidence on the Efficacy of Treatment

- Oslo Diet-Heart Study
- Lipid Research Clinics Coronary Primary Prevention Trial
- Helsinki Heart Study
- West of Scotland Coronary Prevention Study
- Scandinavia Simvastatin Survival Study
- Atorvastatin Versus Revascularization Treatments
- Treating to New Targets
- Myocardial Ischaemia Reduction and Aggressive Cholesterol Lowering study
- Other Studies and Trials.

Unit 3

Screening and Classification of Hyperlipidemia

- Principles and Pitfall in Hyperlipidemia Screening
- Interpreting Blood Test Results

- Cutpoints for Dyslipidemia
- Fredrickson Phenotyping
- Primary and Secondary Hyperlipidemia.

Unit 4

Coronary Heart Disease Risk Assessment

- Concept of risk factor assessment
- Major coronary heart disease risk factors
- Assessment of a patient's overall risk for coronary heart disease.

Unit 5

Pharmacological Treatment of Hyperlipidemia

- Identification and treatment of hyperlipidemia
- Treatment Goals
- Initiation of Pharmacotherapy
- Choice of pharmacological agents
- Monitoring patients on lipid lowering therapy.

Unit 6

Non-pharmacological Treatment of Hyperlipidemia

- Biological factors contributing to increased risk
- Diet-related factors in hyperlipidemia
- Physical activity
- Multifaceted lifestyle approach to reduce risk of CHD.

FACE-TO-FACE SESSIONS

Seminar 1: 11 October 2003

2.00pm – 4.00pm (2 CME points)

- 1) Epidemiology of Hyperlipidemia
- 2) Review of Evidence on the Efficacy of Treatment
- 3) Screening and Classification of Hyperlipidemia

Workshop 1: 11 October 2003

4.00pm – 6.00pm (2 CME points)

Group A: Case discussion and Implementing Disease Management Strategies

Group B: Dietary Counselling Skills

Seminar 2: 12 October 2003

2.00pm – 4.00pm (2 CME points)

- 1) Coronary heart disease risk assessment
- 2) Pharmacological Treatment of Hyperlipidemia
- 3) Non-pharmacological Treatment of Hyperlipidemia

Workshop 2: 12 October 2003 (REPEAT)

4.00pm – 6.00pm (2 CME points)

Group A: Case discussion and Implementing Disease Management Strategies

Group B: Dietary Counselling Skills