

ABSTRACT - DATO' SRI DR. HAJI AZHARI ROSMAN

Redefining CV Risk Management - Lipids: The Multidisciplinary Approach

Introduction

Cardiovascular disease is a leading cause of morbidity and mortality worldwide, accounting for over 17 million deaths annually. It is important to reevaluate our current approaches to managing CV risk factors to achieve better outcomes for patients. In Malaysia, cardiovascular disease is the number one cause of death. Apart from lipids, hypertension, diabetes, smoking are the other major risk factors.

Importance of Lipids in CV Risk Management

Lipid management plays a crucial role in the prevention and management of CV disease. However, the existing traditional lipid management strategies have their limitations regarding the efficacy and practicality of implementation. In our IJN retrospective survey over 2 years, about 85% of patients were prescribed moderate to high intensity statins. Unfortunately, only 50% of them have been treated to targets.

The targets of LDL-C therapy have changed over the years. The major guidelines emphasize treating targets based on risk stratification. The secondary prevention targets are now 1.8 mmol/l to 1.4 mmol/l. In very very high risk cases, it may be necessary to reduce this to below 1 mmol/l.

The importance of LDL-C management is dependent on (A) the level of exposure and (B) the duration of exposure to LDL-C. Additionally (C) the risk amplification by other comorbidities such as diabetes and hypertension.

Current Landscape of CV Risk Management

The traditional approach to lipid management primarily consists of cholesterol-lowering drugs, statins, administered by primary care physicians. While effective in reducing CV risk, this approach has limitations such as suboptimal adherence to therapy, intolerance to statins, and the inability to address all aspects of a patient's health.

Newer Therapies for LDL-C Management

Novel lipid-lowering agents are emerging, such as small interfering RNA (siRNA) drugs, proprotein convertase subtilisin/kexin type 9 (PCSK9) inhibitors, and nutraceuticals. Their therapeutic benefits are becoming increasingly evident, and when combined with the traditional lipid-lowering drugs, the outcomes can be better. There are now various treatments available for controlling LDL-C:

1. Statins
2. Fibrates
3. Injectables (e.g. PCSK-9 inhibitors and SiRNA molecules)
4. Ezetimibe

Need for Multidisciplinary Approach in CV Risk Management

It is essential to recognize that lipids are just one aspect of CV risk management. The multidimensional nature of CV risk management demands a multidisciplinary approach. Collaboration of healthcare professionals from different specializations brings diverse expertise and contributes to a better and comprehensive understanding of the factors that contribute to CV risk. This is especially so in order to explain to the patient; (A) his risk factor including lifetime risk and 10-year risk of having an event, (B) the targets based on secondary or primary prevention, (C) the various medications that need to be taken alone or in combination. The healthcare professionals also need to educate patients who are on injectables. They also play a role in discussing the possible side effects.

Emergence of Multidisciplinary Approaches

Increasingly, a multidisciplinary approach to CV risk management is being explored, incorporating specialties such as cardiologists, endocrinologists, nutritionists, exercise physiologists, and behavioral specialists. The ultimate objective of this approach is to find holistic and optimal management of CV risk.

Multidisciplinary Approach to CV Risk Management

It is crucial to assess individual CV risk to provide a tailor-made, comprehensive CV risk management program. Current risk assessment tools, such as the

Framingham risk score, lack accuracy in predicting risk in certain patient populations. The multidisciplinary approach to CV risk management involves different health care professionals working together in the creation of an individualized plan for managing CV risk. Each health professional brings their expertise in a particular aspect of the patient's needs. In IJN, we have established a cardiovascular risk reduction clinic (CRRC) involving various disciplines. This involves Cardiologists trained in lipid management, Dieticians', Nurse Educators to educate patients on maintaining risk reduction and adherence. The Endocrinologists are also available to help manage diabetic patients when necessary.

Role of Cardiologists

Cardiologist's role is to manage acute CV events, perform complex interventions to manage ischemic heart disease, and provide longitudinal care for patients in secondary prevention.

Role of Endocrinologists

Endocrinologists' role is to manage dyslipidemia, insulin resistance, and type 2 diabetes mellitus.

Role of Nutritionists / Dietician

Nutritionists play a crucial role in creating an optimal dietary regimen that meets the patient's nutritional needs and reduces CV risk.

Role of Exercise Physiologists

Exercise physiologists customize appropriate physical activity programs that help reduce CV risk and improve overall health and wellbeing.

Role of Behavioral Specialists

Behavioral specialists offer cognitive behavioral therapy that helps patients to develop healthy lifestyle behaviors that help reduce CV risk.

Evolving Concepts in Lipid Management

The emerging concepts in lipid management focus on individualized risk

assessment, non-HDL cholesterol, emerging therapeutic approaches, and digitization of CV risk management.

Conclusion

In conclusion, the management of lipids is a significant facet of CV risk management. However, it is essential to approach CV risk management in a multidisciplinary manner, incorporating different healthcare professionals to manage all aspects of a patient's health. The incorporation of personalized risk assessment, treatment options like non-HDL cholesterol, emerging therapies, and digital health technologies would bring forth a better management of CV risk.