SUMMARY AND CONCLUSION

The role of various risk factors of myocardial infarction were assessed and compared with age and sex matched controls. The findings of the present study can be summarized as follows.

- The maximum number (61.4%) of cases were observed in the age group 51-60 years. 25.2% of patients were between 41-50 years of age while 9.9% of patients were between 31-40 years of age and 3.5% of patients were below 30 years of age.

- Three fourth of our patients were from rural background. The change in lifestyle and urbanization of our villages may be the reason for the increased rate of CAD in rural population.

- Measure of waist-hip ratio is needed to bring about meaningful changes in the obesity and the BMI is inadequate for the same.

- In our study a significant number of patients were physically active and not exhibiting sedentarism. Sedentarism is one of the risk factor for premature CAD.

- Majority of the patients in the present study were coming in the group of low socioeconomic status. As a measure of socioeconomic status we considered the education, occupation and income of the patient.
These risk factors are preventable up to certain extent by improving the socioeconomic status and these are minor risk factors of MI when considering the other risk factors.

- Unhealthy dietary habit which may be a risk factor of MI, especially low consumption of vegetables and fruits, high consumption of trans FA, saturated FA and low consumption of PUFA which may be catagorised under minor risk factor of MI.

- In our study serum total cholesterol; TG and LDL cholesterol are increased significantly in MI patients when compared with that of control subjects. In the case of HDL cholesterol, the condition is reversed. But a major number of MI patients were normal in their FLP level when compared to western population.

- We observed that Lp (a) level was highly significant in our study. But the clinicians here in north Kerala were not giving much importance in Lp (a) monitoring. Here we suggest the investigation of Lp (a) also included in routine analysis for the better management of CAD.

- The level of cardiac markers such as AST, CK-MB, cardiac troponin T and cardiac troponin I were found increased in patients when compared with that of healthy controls. AST is an obsolete marker of MI. With many qualities of an ideal marker, troponins are favourably considering in the management of MI. However, CK-MB has proven as most
useful marker for the diagnosis of MI and certain clinical situations, especially in cases of detecting re-infarctions.

- There was a significant elevation in CRP level of MI patients when comparing with the healthy controls. We suggest a strong association between CRP levels and MI. It is also a predictor of future cardiovascular events.

- Present study shows a significant increase of homocysteine level in MI patients. It is reasonable to assume that dietary deficiency of folic acid and or cobalamine in certain MI patients may increase the homocysteine level. So it is necessary to include fruits and vegetables in routine diet to ensure cardiac protection.

- We found that plasma fibrinogen level was significantly high in northern Kerala population and high serum fibrinogen levels are risk factor for premature MI. The estimation of fibrinogen level in plasma may be useful for the prediction and better management of MI.

- It was noticed that nearly half of the MI patients (45.5 %) were diabetic in our study. As the diabetic patients remain a high-risk group for MI, an increased awareness and appropriate delivery of established therapies to this group is essential in the face of a rising diabetic population of Kerala. Also we have to consider the impaired glucose
tolerance or pre diabetic condition, as it is associated with coronary artery disease.

- We noticed that 33.7% of the MI patients in our study group were hypertensive, and were using antihypertensive agents. As hypertension is one of the risk factors for MI, public awareness programs are still more essential in this regard. Pre-hypertensive condition also should be considered.

- In our study 68.8% of the MI patients were smokers. It is a predominant risk factor for MI in rural area of Kerala, especially in low socio economic classes. So the patient education and awareness programs are needed in this regard to prevent the risk of CVD.

- In present study 29.7% of test group subjects were having a positive family history of IHD. The person with a positive family history of IHD should be cautious about controlling all of the other risk factors.