## DISCUSSION

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The study was carried out in Shree Sayaji Hospital, Baroda between June 2007 to October 2008, with a total number of 50 patients.

The study was designed:

- 1) To estimate the levels of serum lipoprotein (a) in young patients with myocardial infarction.
- 2) To compare serum lipoprotein (a) levels with conventional risk factors and to see for any significant association between them.
- To carry out the statistical analysis to evaluate lipoprotein (a) as an independent risk factor for myocardial infarction.

## **MYOCARDIAL INFARCTION:**

- Out of 50 patients with myocardial infarction, 12 were females and rests of all were males. (Male to Female ratio was 3.2). Thus there was a male preponderance.
- > Chest pain was the most common presenting symptom present in all the patients.

- Smoking was the commonest risk factor associated with myocardial infarction in this study.
- The difference in Total Cholesterol levels between the case and control group was not significant (p value = 0.8192)
- The difference in levels of HDL-C between the case and control groups was not statistically significant (p value = 0.11).

- The difference in LDL-C levels observed between the case and control groups in this study was not statistically significant (p value = 0.8143).
- The difference in the serum triglyceride levels between the case and control groups was not significant (p value=0.1177).
- The difference in the cholesterol/HDL-C ratio between the case and control groups was not significant with the p value of 0.2129.
- The difference in the lipoprotein (a) levels between the case and control groups was highly significant (p value = 0.0001) suggesting lipoprotein (a) as an important predictor of coronary heart disease.
- These all data shows that only lipoprotein (a) is found significantly (99..9 %) higher in compare to controls in patients of myocardial infarction ,while S.cholesterol, S.HDL-Cholesterol, S. VLDL- Cholesterol, S.LDL-Cholesterol & S.Triglyceride level does not have any significant difference. It means Lipoprotein (a) has played role as independent risk factor for myocardial infarction.
- The lipoprotein (a) levels in case patients with S. Cholesterol <200 mg% was statistically significantly (p value = 0.001) higher in compare to controls suggesting that in patients who did not have high levels of S. Cholesterol, the higher levels of serum lipoprotein (a) triggered the coronary artery disease. Thus Lipoprotein (a) level is not dependent on serum cholesterol level. This is again means that Lipoprotein (a) can be an independent risk factor for myocardial infarction.