MATERIAL AND METHODS
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Case material for the present study consisted of 32 male subjects aged between 40 to 60 years, who were divided into following groups:

GROUP I

This group consisted of 10 healthy subjects. These subjects were subjected to single dose high cholesterol fat diet (HCFD) and on the basis of post prandial (vide infra) were again divided into two subgroups IA and IB.

GROUP IA

This group consisted of individual who showed adverse lipid profile on single dose HCFD and were labelled as "High risk group" (10 subjects). These subjects showed a significant rise of STC and/or HDL at first post prandial hour with or without fall of HDL.

GROUP IB

This group was similarly assessed and on same criteria were labelled as "Low risk group" (4 subjects). These subjects showed fall of STC and/or HDL with or without rise of HDL.

GROUP III

This group had 18 subjects who were subdivided in two groups II A and II B.
Group IIA

All (9) cases of group IIA documented coronary artery disease (CAD) on electrocardiogram and clinical criteria.

Group IIb

This group consisted of 9 subjects. They were asymptomatic with normal resting ECG but revealed abnormality in their ECG's on exercise.

Subjects of group I were asked to stop all medicines (interfering with interpretation of ECG 3 weeks prior to the study). On the day of study subjects were asked to come with light breakfast and were allowed to rest for half an hour. The blood pressure was recorded in both supine as well as standing posture. After which a 12 lead ECG was recorded in next step. They were subjected to exercise on bicycle Ergometer on graded speeds to achieve 85% of target heart rate (THR), test was stopped when any of following occurred, (1) when THR was achieved, (2) when patients felt chest pain or tiredness, (3) when obvious ischemic changes were recorded.

Simultaneous recording of blood pressure was recorded through out the exercise.

Subjects of group II were asked to have an overnight fast of 14 hours. Next day morning fasting
A blood sample was drawn in recumbent posture without producing venous stasis (Koerselmer et al., 1961). HCPD consisting of 3 eggs plus 250 ml of milk was given and post prandial samples were taken at first and third postprandial hour.

Detailed past history related to the episode of myocardial infarction, present complaint, if any, dietary and personal history were also recorded. Throughout the procedure subjects were confined to bed and were not allowed to smoke. Serum was separated from each blood sample and following lipid parameters were assessed by enzymatic kit method:

1. Serum total cholesterol (STC).
2. High density lipoprotein (HDL)
3. Serum triglyceride (STG).

Low density lipoprotein (LDL) was calculated with the help of following formulae given by Fredrickson, 1972.

$$\text{LDL} = \text{STC} - (\text{STG}/5 + \text{HDL}) \text{ mg/dl}.$$
AIMS AND OBJECTS
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Studies related with single and prolonged high cholesterol fat diet loading in healthy volunteers and its effects on serum lipid profile are being done in our department for the last so many years. The proposed study has been planned to assess whether some of these subjects who were at high risk (as per their fasting and post prandial lipid profile) actually had increased risk of CAD. The study also aims at detecting any abnormality in lipid profile (both fasting as well as postprandial) in proved cases of CAD. Thus the aims of the present study were:

1. To assess the incidence and severity of IHD by resting and exercise tests in subjects who were fed single dose of high cholesterol fat diet (HCFD).

2. To find out incidence of abnormal cholesterol test in proved cases of coronary artery disease.