MATERIAL AND METHODS
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The present study was conducted on 25 subjects from two sources:

1. Those admitted in the medical wards of M.L.B. Medical College, Hospital, Jhansi.

2. Those attending the hypertension clinic, department of medicine, M.L.B. Medical College, Hospital, Jhansi.

Detailed history revealed that 13 subjects were suffering from hypertension while 6 were suffering from combination of coronary artery disease (CAD) and hypertension, 4 were suffering from diabetes mellitus with hypertension and 2 were suffering from combination of hypertension, diabetes mellitus and coronary artery disease.

DESIGN OF TEST

Informed consent was taken from each subject. The subjects were asked to have their normal dinner on the previous night and not to take anything after this except water. Next morning fasting blood sample was taken. Then the subjects were asked to take the drug in a regular dosage of two capsules twice daily for 3 months. Similar monthly blood samples were taken. During the study period they were told not to change their dietary or personal habits as this could otherwise have effect on the lipid
profile.

Serum was separated from the blood samples and following tests were performed:

A. **SERUM TOTAL CHOLESTEROL (STC)**

   It was estimated by following method using chemical kits of Ethnor.
   
   1. Added 5 ml of cholesterol reagent in each of three test tubes name T, S, and B for 'test', 'standard' and 'blank' respectively.
   
   2. To this added 25 ul of serum, cholesterol standard (250 mg/dl) and distilled water in T, S, and B respectively.
   
   3. Mixed them well for 10 seconds and placed in a boiling water bath for exactly 45 seconds.
   
   4. Cooled them immediately in running tap water and mixed their contents.
   
   5. Optical densities were read at 560 nm, setting the blank as zero.
   
   6. Serum cholesterol calculated by the formula:

   \[
   \text{STC (mg/dl)} = \frac{\text{Optical density of test}}{\text{Optical density of standard}} \times 250
   \]

B. **SERUM TRIGLYCERIDES (STG)**

   It was estimated by using enzymatic kits of Ethnor employing following method:
   
   1. Reconstituted each vial of reagent I (supplied in the form of lyophilised enzymes) in 2.5 ml distilled water.
2. Took 0.5 ml of reconstituted reagent I in each of
three test tubes labelled T, S and B for test,
Standard and Blank respectively.

3. To this added 0.5 ml of reagent II (Phenol solution)
in each of three test tubes labelled T, S and B and
mixed them all well.

4. To this added 20 ul of serum triglyceride standard
(300 mg/dl) and distilled water in T, S and B
respectively, mixed well and incubated at 37°C±0.5°C
for 10 minutes.

5. Finally 2 ml of distilled water added to all three
tubes, mixed and reading taken at 500 nm setting
the blank at zero.

6. Triglyceride calculated by using the formula:

\[
\text{STG (mg/dl)} = \frac{\text{Optical density of test}}{\text{Optical density of standard}} \times 300
\]

C. ESTIMATION OF HDL CHOLESTEROL

It was also estimated by using the enzymatic
kits of Ethnor by following method:

1. To precipitate the LDL and VLDL cholesterol and chyle-
microns, mixed 0.5 ml of lipogent reagent with equal
amount of serum and kept at room temperature (25±5°C)
for 10 minutes. Then centrifuged it at 2000 rpm for
20 minutes.

2. Working standard was prepared by diluting the provided
standard with distilled water in the ratio of 1 : 7.
3. Working reagent was prepared by mixing the reagent I (lyophilised enzymes) with reagent II (Phenol solution).

4. Took 1.0 ml of working reagent in each of three test tubes labelled T, S and B for test, Standard and Blank respectively.

5. To this added 100 ul of supernatant (obtained in step 10 working standard and distilled water to T, S and B respectively and mixed them well.

6. After incubating all the tubes at 37°C for 15 minutes added distilled water 4.0 ml to each and reading taken at 515 nm after mixing the tubes well and setting the Blank at zero.

7. HDL cholesterol calculated by the formula:

   \[\text{HDL (mg/dl)} = \frac{\text{Optical density of test}}{\text{Optical density of standard}} \times 50\]

D. LDL ESTIMATION

   LDL cholesterol was directly calculated by Friedwald's formula:

   \[\text{LDL (mg/dl)} = \text{STC} - (\text{STG/5} + \text{HDL})\]

E. ELECTROCARDIOGRAPHY

   E.C.G. was recorded monthly and observed ST segment changes.

   Simultaneously, routine biochemical tests were done at monthly intervals to check any associated change in these parameters.