CONCLUSIONS
The present study was conducted on 90 cases including 35 control and 65 different types of leprosy patients from June 1981 to March 1982. Out of 65 leprosy patients, 77 were 7; 85 were 10; 38 were 15; 21 were 10 and 11 were 17 on the basis of histopathological criteria of Ridley and Jopling.

The majority of cases (40) were in third to fifth decade with male preponderance except in tuberculoid type where male-female ratio was almost equal.

T-cell %, B-cell %, lymphoblast transformation response to PEP, skin tests using lepromin and candida antigens were done in all cases. T-cell were studied by rosette formation with unsensitized sheep red blood cells; B-cells were studied by rosette formation with antibody and complement coated sheep red blood cells. Lymphoblast transformation response to PEP was observed after 3 days culture in TC medium 199 after staining by Leishman's stain.

These studies had shown that there was diminished cell mediated immune response in various types of leprosy being maximum in lepromatous and minimum in tuberculoid type in Ridley-Jopling scale.

It was observed that mean (±SD) of T-cell percentage in control, 77, 57, 53, 11 and 11 were 66.66 (±5.11), 64.50 (±3.50), 55.69 (±7.64), 65.95 (±4.77), 65.95 (±7.37) and 45.95 (±4.45) respectively.
On contrary, B-cell count was observed to increase gradually from tuberculoid pole to lepromatous pole. The mean (± SD) of B-cell percentage in control, TT, HT, HH, HL and LL were 33.66 (±3.60), 27.05 (±8.15), 23.78 (±7.09), 30.76 (±4.30), 35.2 (±4.62) and 43.5 (±8.0) respectively.

The lymphoblast response to PHA was found to decline gradually from tuberculoid to lepromatous-pole like decrease in T-cell percentage. The mean (± SD) of percentage of lymphoblast transformation response in control, TT, HT, HH and HL were 26.12 (±3.06), 24.45 (±3.04), 27.87 (±4.33), 35.27 (±3.60), 13.05 (±3.31) and 13.47 (±3.39) respectively.

The skin tests using candida and leprosia were also performed in control as well as leprosy cases. The percentage of positive cases with leprosia antigen in control, TT, HT, and HH were 66.6, 66.6, 48.8 and 60 and with candida antigen were 30.5, 46.6, 45.4 and 20.9 respectively. HL patients did not respond to such extent that they could be labelled as positive while LL patient failed to respond with either antigen.

The following conclusions were drawn from the present study:

(i) The incidence was high in male in all type of leprosy except in tuberculoid type where it was almost equal in both sexes.
There was fall in percentage of T-cell in all types of leprosy cases. The fall being maximum in LL and minimum in TT. The borderline group showed T-cell percentage in between the polar forms.

Absolute T-cell count was diminished in BB, BL and LI while almost equal in TT and BT with control.

There was gradual increase in B-cell percentage from tuberculoid pole to lepromatous pole. The increase in B-cell percentage was more marked in LL and least marked in TT. BB was in between the polar forms.

Lymphoblast transformation response to FHA was decreased from TT to LL similar to T-cell percentage.

Cutaneous response to lepromin and candida antigen were positive in TT, BT and BB while negative in BL and LI. The percentage of positive cases with lepromin was more as compared to candida antigen.

From the present study, it is concluded that there is gradual fall in cell mediated immune response from tuberculoid pole to lepromatous pole. Borderline group lie at mid position of spectrum while BB is closer to TT and BL is closer to LL. The above mentioned tests are useful to assess the cell mediated immune status of patients which are very important during reversal reactions and during course of therapy when patients may shift on either side of spectrum in BT, BB, and BL.