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CELL MEDIATED AND HUMORAL IMMUNE RESPONSES IN HUMAN TYPHOID FEVER

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Antibodies to the O, H, and Vi antigens of *S. typhi* develop in typhoid fever but their role in protection has been queried; relapses and reinfection occur in spite of high antibody levels. Cell mediated immunity is now thought to play an important role in protection and recovery from typhoid.

We have investigated the cell mediated immune response (CMIR) using the Leucocyte Migration Inhibition Test (LMIT) on peripheral human blood as an index of CMIR and the Humoral Immune response (HIR) using the Widal test on 44 typhoid patients (31 adults and 13 children) and in two control groups—normal healthy persons and conservancy labourers (CL) who were occupationally exposed to *S. typhi*.

The typhoid patients and the CL had significantly higher CMIR than the normal persons. The O and H antibody titres in the patients were significantly higher than in both control groups.

The adult and paediatric patients did not differ in their CMIR or in the H and Vi antibody levels.

The CMIR and antibody levels in the patients showed no relation to the occurrence of complications (haemorrhage, perforation, ileus or relapse).

Neither chloramphenicol therapy nor the duration of the illness (after the first week of the illness) were related to the CMIR and HIR.

The development of a CMIR in typhoid and its possible role in protection is relevant to efforts in the improvement of antityphoid vaccination schedules which could induce a CMIR.

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