SUMMARY

Summary

The peroxidase content and lysozyme activity in the polymorphonuclear leukocytes in 20 patients suffering from active rheumatic fever were measured.

They were taken as two parameters for the assessment of the intracellular killing capacity of these cells during the course of this disease.

A decrease in the peroxidase content in polymorphonuclear leukocytes of cases of rheumatic fever was found (m: 306.05 $\pm$ 23.97) in comparison to values obtained from controls (m: 343.7 $\pm$ 14.78). This decrease is statistically significant ($P < 0.0005$).

The bactricidal capacity of these cells might not be much affected as cells with complete congential absence of this enzyme retain much of its capability to kill microorganisms.

The measurement of lysozyme activity has revealed an increase in the group of rheumatic cases (m: 164.2 $\pm$ 11.86) in comparison to the group of controls (m:144.6 $\pm$ 13.31).

Again this increase is statistically significant ($P < 0.0005$).

This increase of lysozyme activity in polymorphonuclear leukocytes of rheumatic cases might be reguarded as a compensatory mechanism in the cell to combat infections.

It is recommended that the bactricidal capacity of polymorphonuclear leukocytes in active rheumatic fever be further studied using other techniques such as killing of Staph aureus or Candida albicans.