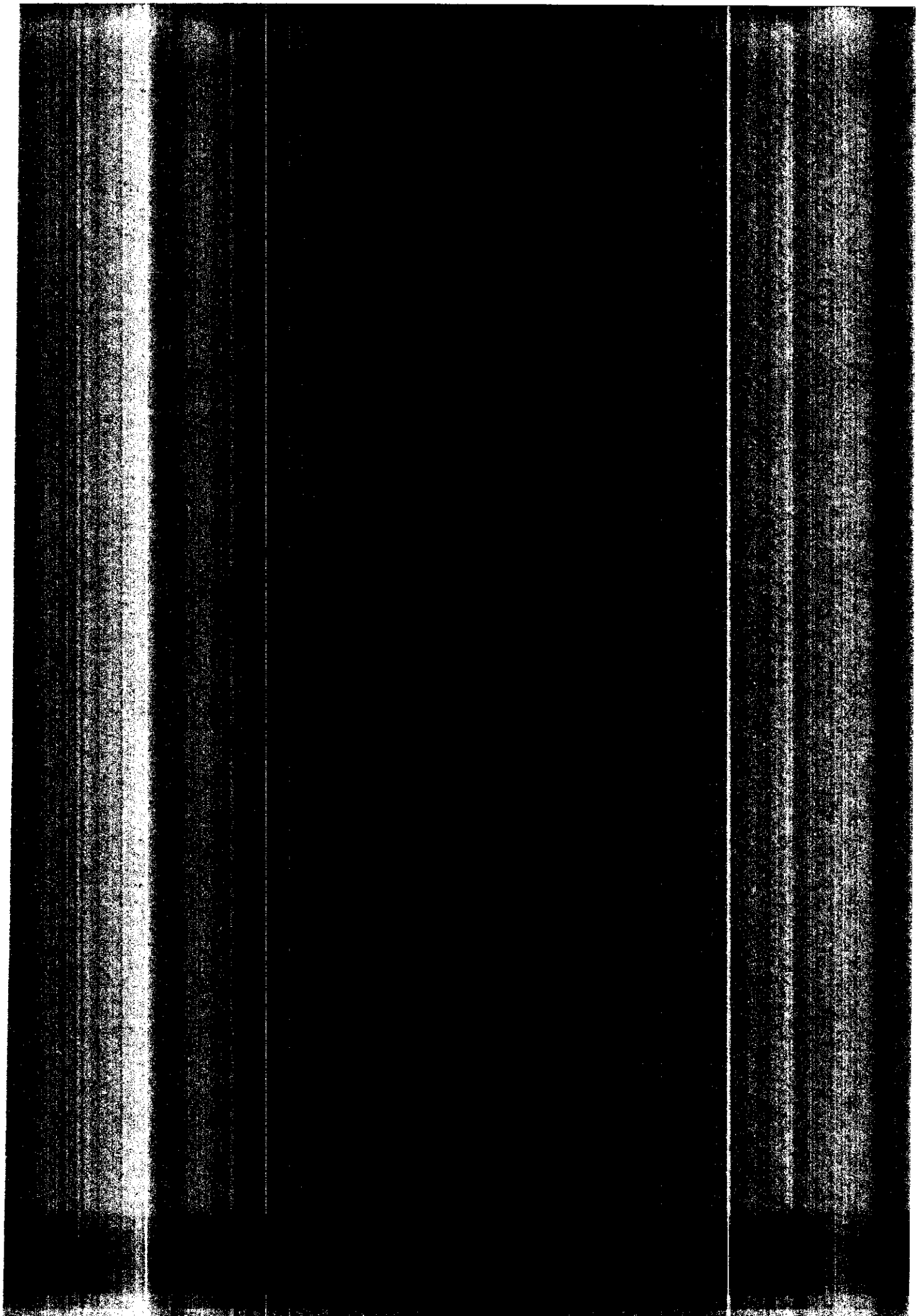

SUMMARY AND CONCLUSION

Bacterial meningitis is a serious clinical condition, and an early and reliable diagnosis is of great importance to the outcome of the disease. Because of the necessity of immediate therapy, the results of cerebrospinal fluid cultures cannot be a waited, and these results may even be obscured if the patient had received antibiotic treatment before hand ***(Balzer et al., 1983).***

The aime of this work is : To meausre IL-8 in CSF and plasma in children with bacterial or viral meningitis, and to determine whether the initial CSF or plasma concentration of IL-8 correlate with clinical presentation or with outcome.

The study was carried out on 50 children categorized into 5 groups, acute bacterial meningitis, acute non bacterial (presumed viral) meningitis, tuberculus meningitis, partially treated bacterial meningitis and control group.

In the present study CSF IL-8 level in bacterial group was significantly higher than that of (viral- T.B. and control group) but it was insignificantly diferent than that of partially treated bacterial group. All 4 groups significantly higher than control group.

Plasma IL-8 level in bacterial group was significantly higher than that of viral-T.B.-partially treated and control group. All 4 groups significantly higher than control group.

CSF cultures of 14 bacterial cases showed that 6 cases were haemophilus influenzae, 7 cases were of N.meningitidis and 1 case was with sT. pneumoniae organism.

In this study, the level of CSF IL-8 in patients with meningitis was higher than the level of plasma IL-8 in patients with meningitis.

There was still high level of CSF IL-8 in partially treated bacterial group who received I.V. antibiotic from (2-4) day of admission.

In the present study, positive significant correlation was found between CSF IL-8 and plasma IL-8 in bacterial and viral group. The level of IL-8 in CSF was higher than the plasma IL-8 level.

Also, in the present study. There was positive significant correlation between CSF IL-8 and CSF cells in bacterial group.

In the present study CSF IL-8 was correlated with the presence of coma of bad prognosis during the admission.

From this study we concluded that :

CSF IL-8 level is a simple test, easy, reliable and rapid for differentiation between bacterial and non bacterial (presumed viral) meningitis.

Detection of CSF IL-8 is more likely to be due to local production rather than a reflection of increased plasma levels.

Also, CSF IL-8 was very high in cases with acute clinical complication (coma), so it is beneficial in predicting the outcome.

We Recommended :

Further studies with larger number of samples to allow us to define acut off value reliably identifying bacterial meningitis and to explore the clinical application of these observation in the different groups of meningitis and use it as a predictive value of prognosis.