

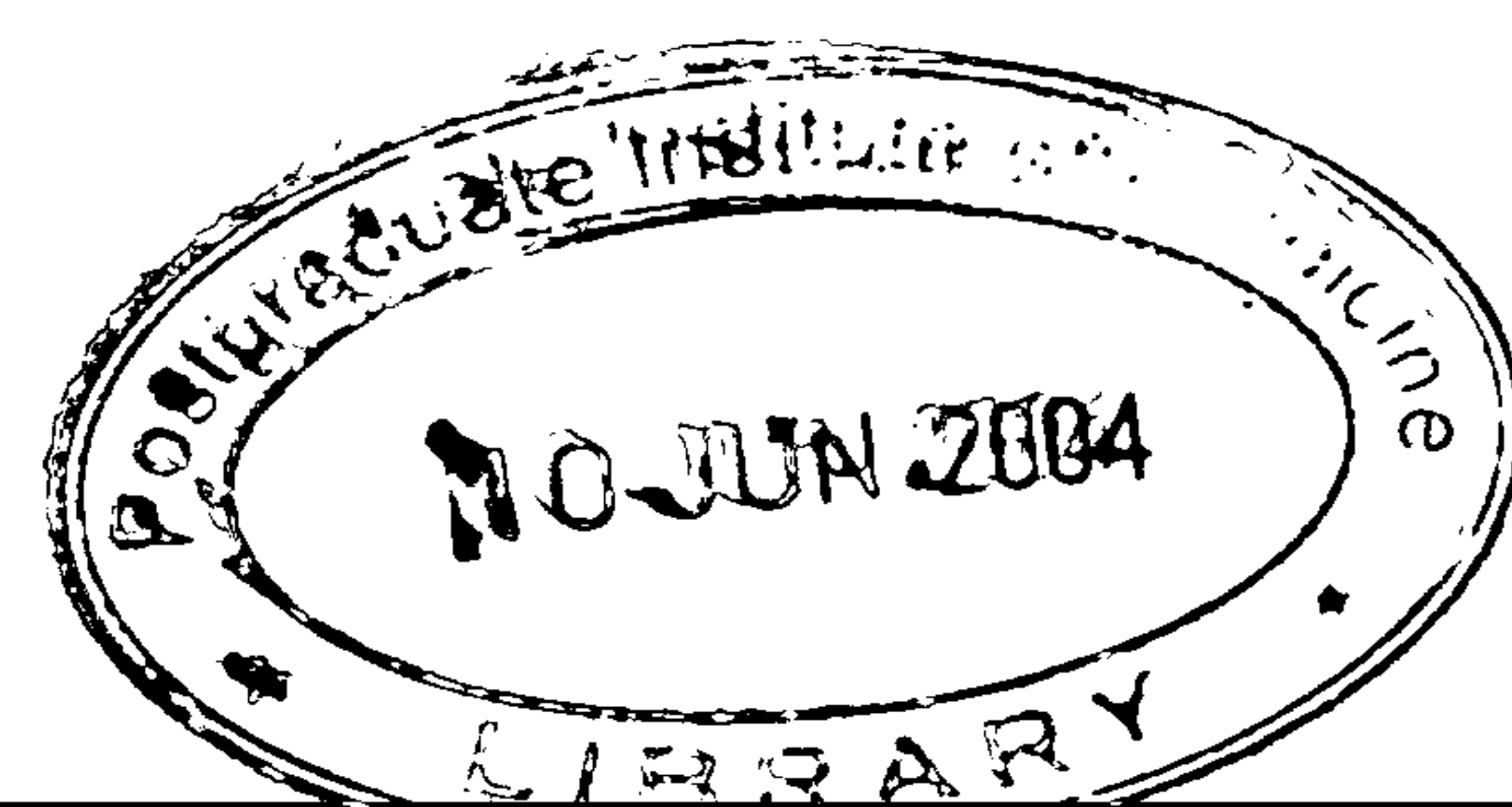
## SUMMARY

Community acquired bacterial meningitis causes substantial morbidity and mortality. According to studies done world-wide, community acquired bacterial meningitis is commonly caused by one of the three species of bacteria: *Haemophilus influenzae*, *Neisseria meningitidis* and *Streptococcus pneumoniae*. But the proportion due to each organism varies among geographic regions. Community acquired bacterial meningitis can also be caused by coliforms, group B streptococcus and *Listeria monocytogenes*, particularly during early infancy, among elderly and in debilitated, alcoholic and diabetic adults. But in our country, studies are lacking to show the real epidemiological pattern of community acquired bacterial meningitis.

This study was mainly focused on assessing the value of parameters of CSF analysis, Gram staining and antigen detection in the diagnosis of community acquired bacterial meningitis. Other aims were to assess the usefulness of throat swab to detect aetiological agents of acute bacterial meningitis and to determine predisposing factors and clinical parameters in the diagnosis of acute bacterial meningitis.

Forty patients were studied. Lumbar puncture was done in all cases included in the study. Blood cultures and throat swabs were done in many cases as possible. Analysis of CSF, antigen detection, Gram staining and culture was done in all cases. Clinical symptoms, central nervous system signs and predisposing factors were assessed in all patients.

Analysis of the results showed that sugar ratio or protein value alone was not a good indicator in the diagnosis of bacterial meningitis. White blood cells showed a very high specificity but the sensitivity was very low. Only antigen detection yielded



established pathogens of community acquired bacterial meningitis. Gram staining yielded 7 positive cases. Throat swabs gave two isolates of pneumococci.

Study also showed that diabetes mellitus was a common predisposing factor of community acquired bacterial meningitis. Fever, headache, neck stiffness and confusion were the commonest signs and symptoms encountered in the study.