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APPENDIX VII

[From Clinical Neurosurgery, vol. 14, pp. 72-85] Chapter IV

MANAGEMENT OF BACTERIAL MENINGITIS *

(By Paul F. Wehrle, M.D., Allen W. Mathies, Jr., M.D., Ph. D., and John M. Leedom, M.D.)

Acute bacterial central nervous system infections represent, particularly in early infancy, true medical emergencies. Before the advent of modern antibacterial therapy, these infections were usually associated with death or serious disability. At the present time, the case fatality rate remains relatively high, approximately 10 per cent. Higher case fatality rates occur after pneumococcal meningitis, particularly among older individuals, with somewhat lower mortality accompanying disease due to Hemophilus influenzae, Type B, and Neisseria meningitidis. Infections seen among newborn and young infants are most frequently caused by enteric organisms and result in a mortality rate of at least 50 per cent. Serious neurological sequelae, an important problem at any age, occur in at least 50 per cent of those cured bacteriologically.

Infancy and childhood are the ages of greatest incidence of these infections. Table IV.I shows data from the Los Angeles County General Hospital during a 12-month period ending in July 1966. During that year, 285 patients representing all age groups, all socioeconomic levels, and all geographic areas within the county were treated. Some 69 per cent of all our patients were less than 15 years of age, and 84 (or 29 per cent) were infants less than 1 year old. These data also clearly show the substantial increase in severity of infection associated with older age groups and the higher mortality at the extremes of life. Only two of six (33 per cent) of the patients less than 2 months old who died were placed in the severe category at the time of admission. In contrast, 21 of the 23 (91.3 per cent) older patients who died were judged to be severly ill on admission. These data suggest the relative difficulty of assessing the severity of the illness in young infants.

^{*}This research was supported in part by Contract DA-49-193-MD2874 from the United States Army Research and Development Command, Office of the Surgeon General, Department of the Army, by Grant 5-T01-A100275 from the Public Health Service, and the Hastings Foundation Fund.

Note.-Numbered references at end of article.