

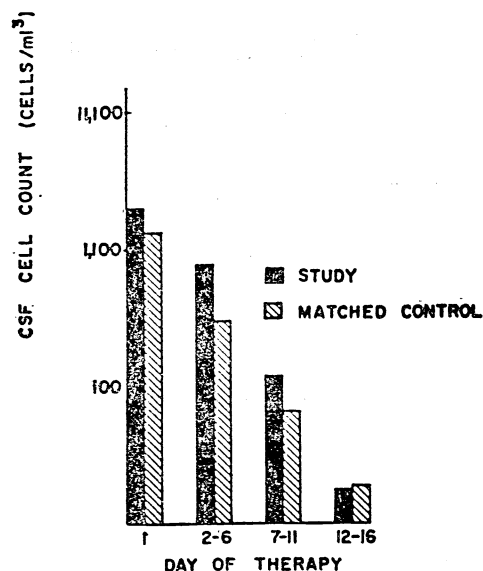


FIGURE 3.—Mean cerebrospinal fluid protein values of study and matched control patients.

RANGE OF CEREBROSPINAL FLUID CELL COUNTS PER CUBIC MILLILITER

Study group.....	90-19,500	3-6,000	2-237	0-103
Control group.....	52-11,000	3-4,150	0-182	0-115

In addition to mortality figures and neurologic sequelae, other criteria used to assess the efficacy of antibiotic therapy were: duration of fever after initiation of therapy; eradication of bacteria from the spinal fluid, and return of the spinal fluid cell count, sugar, and protein to normal values. The duration of fever in the ampicillin-treated patients, the matched control patients and the 5 year review patients is shown in Table XI. There does not appear to be any significant difference in the time of defervescence in the three groups. The bacteriologic response to antibiotic therapy was rapid in the groups of patients studied in 1964 and 1965 (study and matched controls). There were no positive cultures within 48 hours after initiation of therapy in either of these two groups. There were insufficient data to evaluate the rapidity of bacteriologic response in the 190 patients receiving conventional therapy during the last 5 years.

The cerebrospinal fluid findings of the study and matched control groups are presented in Figs. 1 to 3. No significant differences in the initial cerebrospinal fluid cell count, protein, and sugar values are apparent in the two groups. These values returned to normal at the same rate in the two groups. The difference in protein values at 7 to 11 days may be a reflection of the small number of lumbar punctures done during that phase of the illness. There were insufficient data to evaluate the cerebrospinal fluid findings in the 5 year review group.

The incidence of drug hypersensitivity and toxicity could be evaluated in the study and matched control patients but not in the 5 year review group. No skin manifestations of hypersensitivity developed in the ampicillin-treated patients. Eosinophilia was observed in 8 patients. The serum glutamic oxaloacetic transaminase (SGOT) was slightly elevated in 8 patients. Three patients developed mild diarrhea which may have been related to ampicillin therapy. The eosinophilia and diarrhea cleared spontaneously in every case, usually without discontinuation of drug therapy. The SGOT returned to normal after cessation of therapy in all patients in whom repeat values were obtained. No hematologic abnormalities developed in the study patients. None of the patients in the matched control group developed evidence of penicillin allergy. Four patients with