As can be seen in Table VI, the severity of the illness was comparable in the study and matched control groups.

The duration of fever prior to admission to the hospital was used as a rough index of the stage of illness (Table VII). There were no outstanding differences in the three groups except for a wide variation in the duration of illness in the "unknown" category.

Bacteriologic studies. Cerebrospinal fluid and blood cultures were obtained from all the study, matched control, and 5 year review patients on admission to the hospital. Repeat spinal fluid cultures were performed on all patients. In the ampicillin-treated and matched control groups the repeat cultures were obtained within 24 to 48 hours after the original culture. Additional cultures were obtained at suitable intervals and prior to discharge. Repeat cultures were also performed on all patients in the "5 year review group" but the time interval was less uniform than in the former two groups. The antibiotic sensitivity tests are described in the previous section on laboratory studies.

TABLE VII.—MEAN DURATION OF FEVER PRIOR TO ADMISSION: STUDY, MATCHED CONTROL, AND 5-YEAR REVIEW PATIENTS

	Study patients (days)	Matched control patients (days)	5-year review patients (days)
H. influenzae	4.9	3.5	3.5
N. meningitidis	1.1	1.6	2.0
D. pneumoniae	2.0	2.3	4.2
Unknown etiology	2.3	8.5	5.2

Antibiotic management. The study patients received ampicillin, 150 mg. per kilogram per day divided into 6 intravenous doses for at least 48 hours. The ampicillin was diluted with 5 c.c. of 0.85N saline and given over a period of 60 seconds. Unused portions of ampules were discarded so that each dose was freshly prepared. After 48 hours the intramuscular route was employed except in instances where patients exhibited a slow response to treatment. In these cases, intravenous therapy was continued for longer periods of time. The average total duration of ampicillin therapy was 2 weeks.

The matched control patients and the 5 year review patients received penicillin, chloramphenicol, and sulfadiazine until an etiologic agent had been identified. Thereafter, the appropriate antibiotic was continued and the unnecessary ones discontinued. The dose of penicillin was 4 to 12 million units per day depending on the size of the child, chloramphenicol, 100 mg. per kilogram per day, and sulfadiazine, 150 mg. per kilogram per day.

RESULTS

A summary of the results of treatment in the three groups of patients is presented in Table VIII.

Seventeen of the 28 ampicillin-treated patients recovered completely (61 per cent), 2 died (7 per cent mortality), subdural effusions were demonstrated in 4 (14 per cent), 1 (4 per cent) had severe neurologic sequelae, and 4 (14 per cent) had minor neurologic sequelae which subsequently disappeared.

TABLE VIII.—RESULTS OF THERAPY: STUDY, MATCHED CONTROL, AND 5-YEAR REVIEW PATIENTS

	Study patients		Matched control patients		5-year review patients	
	Number	Percent	Number	Percent	Number	Percent
Satisfactory course	17	61	12	48	123	64
Deaths	2	7	3	12	18	9
Severe sequelae	1	4	1	4	24	13
Subdural effusion	4	14	5	20	25	14
Minor sequelae	4	14	4	16	(1)	
Total	28	100	25	100	190	100

[1] Unknown.