TABLE 4.—PERCENTAGE DISTRIBUTION OF MENINGITIS PATIENTS BY AGE AND TREAMENT GROUP

Etiology	Regimen [1]	Age group in years: Less than 1	1–4	5–14	15–29	30–44	45–59	60–74	75 or more	Total cases
Haemophilus influenzae	A	[2] 41	50	9	----	----	----	----	----	66
	C	41	51	5	2	1	----	----	----	107
Neisseria meningitidis	A	12	39	14	11	9	11	4	----	56
	C	14	29	22	18	9	4	3	1	77
Diplococcus pneumoniae	A	15	19	12	5	8	17	19	5	41
	C	16	5	5	5	19	19	26	5	42
Unknown	A	28	28	14	14	6	----	10	----	29
	C	25	20	20	6	17	6	6	----	35
Total		26	35	12	7	7	6	6	1	453

[1] A=ampicillin; C=control therapy.
[2] Percentage of total group.

Therapeutic response. Over 85% of the patients were afebrile or had a temperature lower than 100 F rectally by the 7th day in both the ampicillin and control groups (Table 5). Five *H influenzae* patients who received ampicillin had subdural effusions, and 3 of these required surgery, whereas 12 of the control group had effusions, and 1 required surgery. The CSF was re-examined 1 or 2 days after admission. No positive cultures were obtained from *H. influenzae* patients later than 24 hr after admission in the ampicillin group, whereas 6, or 5.6%, of the 107 patients had positive cultures after more than 24 hr of treatment in the group treated with chloramphenicol. It was somewhat surprising that one and three positive cultures after 24 hr were also seen in meningococcal and pneumococcal categories, respectively, during penicillin G therapy.

The data concerning sequelae and mortality are presented in Table 6. As noted, 4 deaths occurred among 66 patients with *H. influenzae* infection in the ampicillin group, giving a case fatality rate of 6.0%. There were 10 deaths, or 9.3% among 107 patients in the control group. With respect to neurological residua, the figures are similar, since 6 of the 66 patients had neurological residua in the amipicillin group, and 11 of the 107 patients had neurological residua in the chloramphenicol group.

The slight increase in residual rate and decrease in fatal outcome in the meningococcal patients treated with ampicillin can be explained by a single patient recovering with sequelae. This difference is not significant.

TABLE 5.—PERCENTAGE DISTRIBUTION OF COMPLICATIONS OF DISEASE AND RESPONSE TO THERAPY BY TREATMENT GROUP

Etiology	Regimen [1]	Problems observed: Persistent fever [2]	Subdural effusions: Total	Subdural effusions: Require surgery	CSF positive at 24 hrs.	Total number of patients
Haemophilus influenzae	A	19.4	7.6	4.5	----	66
	C	12.3	11.3	.9	5.6	107
Neisseria meningitidis	A	5.3	3.6	1.8	----	56
	C	11.4	2.6	1.3	1.3	77
Diplococcus pneumoniae	A	12.4	7.3	----	----	41
	C	26.2	4.7	----	7.1	42
Unknown	A	10.3	----	----	----	29
	C	8.6	2.9	----	----	35
Total	A	12.5	5.2	2.1	----	192
	C	13.5	6.5	.8	3.8	261

[1] A=Ampicillin; C=control group.
[2] Temperature >100° F; (R) >7 days.