

Treatment.—The first cases admitted to the hospital were treated by various methods, but later the arrival of steadily increasing numbers made it almost imperative to use some standard treatment throughout the hospital. Sodium sulphate was selected as being the drug that had given the most satisfactory results, and a system of treatment and dieting, as shown in Appendices B and C, was started in the Samoan and European wards.

The instructions were issued in English and Samoan to the Samoan wards, so that they could easily be explained to the relatives of the sick: this in a great measure overcame the difficulty that had been experienced in preventing relatives overfeeding the patients.

A few selected cases were treated with anti-dysenteric serum, but the numbers were too small to give a reliable indication as to the value of this method of treatment.

Results.—The results of the treatment were on the whole good, only six deaths occurring in the hospital during the year. Of these, four were in children under two years of age, three being Europeans and one a Samoan. The other two cases were: one a mental case, the infection being contracted at the gaol—she was too excitable to rest or receive efficient treatment. The second case was that of a Samoan girl who died within a few hours of admission.

Altogether 195 cases of dysentery were treated at the hospital, with six deaths; but a few of the Samoan patients were taken out by their relatives before the treatment was completed, and consequently the results are not known.

APPENDIX A.

A PRELIMINARY REPORT ON THE AGGLUTINATION REACTION OF THE SERA OF PATIENTS SUFFERING FROM DYSENTERY AND ENTERIC FEVER DURING THE PRESENT EPIDEMIC IN WESTERN SAMOA.

THESE agglutinations were all done with the blood serum of the patients against stock bacillary emulsions from the Commonwealth Quarantine Service Laboratories of Australia, and the method used was the "Garrow's Agglutinationmeter."

In all twenty-seven patients were examined, of whom twenty-two were clinically dysentery cases and five enteric fever, with the following results:—

DYSENTERY CASES.

—	Cases examined.	Pos. B. Shiga.	Highest Dil.	Pos. B. Flex.	Negative.
European	3	3	1 in 320	Nil	0
Half-caste	3	3	1 in 160	Nil	0
Samoans	7	6	1 in 80	Nil	1
Melanesians	3	1	1 in 80	Nil	1
Chinese	6	5	1 in 160	Nil	2
Totals	22	18	4

Enteric Fever Cases.

—	Cases examined.	Pos. "T."	Highest Dil.	Pos. Para. "A."	Pos. Para. "B."
Europeans	1	1	1 in 680	Nil	Nil
Half-caste	1	1	1 in 320	Nil	Nil
Chinese	3	3	1 in 640	Nil	Nil
Totals	5	5

Amongst the European dysentery cases one agglutinated slightly to B. flexner in a dilution of 1 in 160, but the same case agglutinated to B. shiga in a dilution of 1 in 320, so that the case is probably one of shiga infection with a marked group agglutination.

One of the Chinese cases agglutinated at a dilution of 1 in 20 to B. flexner on the fourteenth day of the disease, but by the first day the agglutination to B. shiga had risen to 1 in 80, while B. flexner only slightly agglutinated at 1 in 40, showing that the infection was B. shiga.

The two negative results from the Melanesians were probably due to using too great a dilution of the serum (1 in 20 being the lowest dilution used at that time), and possibly to a greater delay in the production of agglutinins in the Melanesian race.

A post-mortem examination of a case of dysentery in a Melanesian whose blood was not examined showed the typical lesions of a bacillary dysentery.