

In 393 cases treated by serum there was a mortality of 25 per cent. 43 fatal cases, however, are excluded from this series owing to their being moribund, fulminating in type or affected by secondary or mixed infections. Even with these cases added, there is a great reduction in mortality, which averages at least 75 per cent. in untreated cases.

Very striking is the results of treatment in children under one year, an age when the disease is almost uniformly fatal. With serum 50 per cent. recovered, and the analysis indicates that almost all the fatal cases come under treatment as late as the third week of the disease. Favourable results may therefore be anticipated when the injections are begun at an early stage, before hydrocephalus with consequent locking up of infected material in the ventricles occurs. The earlier the treatment is begun the more likelihood is there of a favourable outcome—thus a mortality of only 16.5 per cent. occurred in cases treated in the first three days, whilst it rose to 35 percent. when treatment was instituted later than the seventh day. Benefit may, however, be obtained even in the later cases, particularly when diplococci are found in the exudate. With serum a critical termination of the symptoms occurred in 25 per cent. of cases, and a larger proportion of these cases occurred in cases coming under treatment early in the disease. Relapses require a prompt and vigorous resumption of the injections, when their progress is often arrested and a favourable outcome results.

The diplococci rapidly diminish after the injections, disappearing from the fluid and becoming intra-cellular, together with changes in appearance and a lessened viability in cultures. In 110 cases the diplococci disappeared and lost viability rapidly, and in 10 cases slowly. Diplococci occasionally lurk in favourable niches and from these reinfection doubtless takes place.

The special exudate rapidly loses its turbidity, and associated with this is a rapid fall in the leucocytes of the blood, a change which is to be regarded as a favourable sign.

The conclusions drawn from the analysis of the cases are that the duration of the disease is materially shortened, that chronic types and lesions are prevented and the mortality greatly lowered.

CURT. SEIDEL. "The Treatment of Septic Diseases with Collargolum Enemata." *Deut. Med. Woch.*, July 30th, 1908.

The writer strongly recommends the use of collargolum in enemata, regarding this method as easier of application than the intra-venous, although having the disadvantage of being slower in its action.

Larger doses are recommended than are commonly used, and instead