

This case also beautifully illustrated how the abdominal cavity, although full of clots, fluid blood, and fæces, can, by repeated flushings and washings, be rendered truly aseptic; as has been proved by the examination of the drain that was removed, and from which not a single colony had developed even at the end of a week, and also from the history of the case, and the after result of the operation.

LABORATORY NOTES ON THE BACTERIOLOGY OF DIPHTHERIA.*

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A considerable amount of bacteriological work relating to antitoxin experiments was performed in the laboratory of the Toronto Board of Health, during the closing months of 1894, but it was not until February 1st last, that the examination of diphtheria exudates was carried on in a regular and systematic manner. The importance of such investigations was clearly demonstrated by the results obtained in the Hospital for Infectious Diseases in Berlin and Paris, and the extensive researches of the Health Department of New York. It was, therefore, determined by Dr. Sheard, Health Officer of Toronto, that similiar work should be undertaken in connection with the Isolation Hospital, an institution entirely under city control, and in which the greater number of patients are the victims of diphtheria.

The objects sought were: 1. To confirm clinical diagnosis, and determine doubtful cases. 2. To distinguish between cases of true diphtheria, and those caused by cocci, so that patients affected by the latter could be isolated, and more speedily discharged. 3. To demonstrate the absence of the specific bacillus from the respiratory passages of convalescents from true diphtheria, with a view so shortening the usual twenty-eight days detention in hospital. 4. To assist in the diagnosis of outside cases, thus saving isolation, and disinfection, with their attendant inconvenience and expense. 5. To afford a means of contributing towards a knowledge of the disease.

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The purpose of this paper is that of presenting a brief account of the work performed, and summarizing such facts as seem likely to be interesting or useful. To this end the same general plan has been followed as that adopted in the joint report of Drs. Park and Beebe,† of the Bacteriological Laboratory of the New York Health Department, and presented to Dr. Hermann M. Biggs, Chief Pathologist. Results may in this way be more advantageously compared than with those of Berlin and Paris, where a type of disease of greater severity seems to prevail than either in New York or Toronto.

From Feb. 1st to July 1st, there were admitted to the Isolation Hospital 188 patients said to be suffering from diphtheria. The records also embrace, for the same time, 60 private cases in which the exudates were submitted by city physicians. The details of these 248 cases are complete, as far as the examinations are concerned, and are included in the statements made as to organisms present, but, as these outside cases could not be readily traced, no further particulars were sought.

With regard to the hospital cases it may be assumed that the clinical diagnosis was sufficiently conclusive to warrant the admission of the patients, and it may also be noticed that, as most of them belonged to the poorer classes, they cannot be considered as being amongst the most hopeful. In other words, the hospital clientage may be taken as consisting of apparently pronounced cases, with an unfavorable history, and any statistics gathered from such records will certainly not lead to an underestimate of the diseases commonly classed as diphtheria.

Collection of the Exudate.—The infected material is taken by the attending physician, by passing a swab firmly over any patches of visible exudate on the tonsils, or pharynx, and at once sent for examination to the laboratory of the Health Department. This method is deemed preferable to that commonly practised, in which a culture is at once made by the physician, as it affords an opportunity for the bacteriologist to make an examination of the exudate, as well as the culture, thus forming a check of some value, and also often enabling a reliable diagnosis to be at once pronounced. Another advantage is that the condition of the culture medium can be