

what depends the varying virulence of the coccus.

3. The capsules of the cocci, as well as the "Nagelformige" growth of the pneumonia cultures, are not constant phenomena.

4. The capsules and the "nagelcultur" characterize other micro-organisms, and it cannot be said at present that the pneumonia cocci can be distinguished from them.

Herr Friedlander, of Berlin, said that the cocci of pneumonia were found in the blood during the disease. He had recently obtained the blood by wet-cups in six cases of croupous pneumonia, every precaution being taken to keep it pure. The blood thus obtained was cultivated for cocci. In one out of the five cases these developed and showed their characteristic actions when inoculated. Friedlander thought the capsule and the growth in "nagelform" very characteristic, but not sufficient for a positive diagnosis. The whole life-history must be taken into account. This life-history appears to differ, and this may account for the various forms of pneumonia, and only one has the coccus; or in the different forms the same coccus has a different life-history. The chief efforts must now be made to follow out the different changes in the growth of the organism.

Dr. Gerhardt, of Würzburg, accepted Jürgensen's view of the infectiousness of the disease. He accepted also completely the view of the unity of the disease, and considered it a happy explanation that the various complications of meningitis, pleuritis, etc., were due to local manifestations of the virus. As to treatment, it must be expectant and symptomatic; in the anæmic and feeble, a stimulating treatment. As anti-febrile means he thought veratrine dangerous; digitalis had not achieved as much as expected; kairin acted too irregularly. The most regularly acting substance was nitre (nitrum); in severer cases, quinine: in the worst (febrile) cases, cold baths with stimulants.

Dr. Frantzel, of Berlin, argued against Jürgensen's view that pneumonia was a house disease, citing its occurrence in military hospitals, and its frequency after open-air festivals and exposures. He thought the coccus entered the blood through the lungs. He explained the hæmadenogenous jaundice of pneumonia by the theory that the cocci attack the red blood-cells.

Dr. Ruhile, of Bonn, contended that the view of the infectious nature of pneumonia was not so firmly established as its advocates assumed. It is necessary still to harmonize some of the known facts as to the etiology of pneumonia with the theory of a coccus. Besides, this coccus had not been found in all cases yet.

Professor Nothnagel said that in pneumonia, as in all infectious diseases, we look for a specific, and meanwhile treat symptomatically. In the last twenty-five years alcohol had entered largely into the therapeutics of the disease. Dr. Nothnagel thought that it was often used unnecessarily and excessively. Alcohol is not indicated in ordinary

cases of pneumonia, and should not be used except when specially indicated by the failure of heart power.

Dr. Rosenstein, of Leyden, thought that "though croupous pneumonia may be an infectious disease in many cases, it is not in all." He did not believe in the unity of the disease.

Dr. Baumbler, of Freiburg, said that a patient, a gardener, fell one day into the fire; next day he was brought to the hospital with croupous pneumonia. What rôle the cocci played in such a case was for the future to discover. If pneumonia is an infectious disease, it might be asked whether it is at first a local infection or a general one. With reference to the localization of the alleged virus in other organs, he recalled cases of pneumonia that started off with an acute nephritis; others with a meningitis. These diseases generally ran a parallel course with the pneumonia.

## PNEUMONIA.

A Clinical Lecture Delivered at the Hospital of the University of Pennsylvania.

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GENTLEMEN—The patient now before you is convalescing from an attack of pneumonia. I showed him to you one week ago on the fourteenth day of his attack, completely apyretic. He has not come up after this attack as quickly as we should like to have seen him. His past history has not been altogether satisfactory. In the first place, we find that he is the subject of constitutional syphilis, and, in addition, he has been exposing himself. When seized with pneumonia, he was not a good state of health, and this has undoubtedly retarded convalescence; for he has been completely free from fever for ten days, with a pulse about normal and respirations not over twenty per minute; nor have the physical conditions progressed as rapidly as we desired; while the critical fall of temperature, the failure to rise, the slow pulse, the easy respiration, the tranquil face and the return of appetite, indicate that the process is practically at an end. There are still traces of infiltration along the anterior border of the right lung, showing that the elements of the tissues do not throw off all traces of the morbid action and return to the healthy state, but that the morbid condition is lingering in the epithelial lining of the alveoli. Whether or not this is dependent upon the constitutional infection which he presents is a question which has been discussed, and which we have endeavored to meet by adding iodide of potassium to the treatment, which, for the past few days, has consisted in the administration of carbonate of ammonia. The treatment of the acute stage consisted in the use of carbonate of ammonia, a moderate