

strains show no difference, and all of them show difficulty of growth in fluid media. With repeated transplantation on fluid media, the growth becomes more luxuriant and the virulence likewise increases. By repeated inoculation rabbits can be immunized against virulent cultures. Animals treated with cultures of gonococci are protected from meningococci. Nevertheless, the sera produced by the various strains serve to distinguish the meningococcus from the gonococcus in the agglutination test.

KUTSCHER. "The Isolation of Meningococci from the Nose in healthy persons." *Deutsche Med. Wochen* 1906, p. 1071.

In 1905 the author examined the nasal secretions in one hundred and four healthy persons, and in two cases isolated an organism which could not be differentiated from the meningococcus. During an epidemic of cerebro-spinal meningitis in 1906, the author was able to isolate Gram-negative diplococci from the nose and throat of fifty-six persons not suffering from meningitis. The cultural differentiation of these diplococci from the organism of meningitis was difficult. He claims that four of the strains isolated were true meningococci. The animal experiments also gave results identical with the diplococcus intracellularis. It is shown, therefore, that the meningococcus may be present in a healthy nose and throat without producing disease.

OLMACHER. "The Poison of the Meningococcus." *Jour. Amer. Med. Assoc.*, 1906. Vol. 47. No. 3.

The author by accident discovered the toxicity of the cultures of the organism. The inoculation of the filtered culture or one that had been rendered sterile by the use of trikesol produced fever and collapse within eighteen hours. Smaller doses of the filtered culture produced tetanic convulsions. Cultural fluids which had passed through the porcelain filters were harmless.

The presence of chalk is necessary in the culture medium to ensure a good growth of the organism.

VARIOUS AUTHORS. "The Origin of Anthracosis." *Various Journals*.

Very many papers have been contributed to this subject, and innumerable experiments have been carried out on lower animals to solve the problem. The results of these experiments are then applicable to the subject of tuberculosis, mainly as regards the point of invasion of the tubercle bacilli before reaching the lungs. It is quite probable that the route taken by foreign bodies, such as coal dust and lamp black represented, is also followed by the tubercle bacillus.