

18 years. Purulent conjunctivitis both eyes. Smear negative. Culture meningococcus.

(3) Child aged 3 years. Catarrhal conjunctivitis both eyes. Smear Gram negative diplococci. Culture bacillus influenzae.

(4) Child 7 years. Catarrhal conjunctivitis both eyes. Smear Gram negative diplococci. Culture meningococci.

(5) Child aged 7. Catarrhal conjunctivitis both eyes. Smear Gram negative diplococci and Gram negative diplobacilli. Culture diplobacilli and *B. xerosis*.

(6) Child aged 9. Sister to case 5. Catarrhal conjunctivitis both eyes. Smear Gram positive cocci and Gram negative bacilli. Culture *staphylococcus albus* and *bacillus influenzae*. In each case the diagnosis was made by cultural tests. In cases 3 and 5, although characteristic Gram negative diplococci were found in the smear preparation, the conjunctivitis has been placed as due to the organisms cultivated. In all the cases the conjunctivitis was in the early stage of the disease. In only one case was there much purulent discharge, this was strangely enough one of the meningococcus cases. In all the meningococcus was cultivated from the cerebro-spinal fluid.

The diagnosis of conjunctivitis due to the *staphylococcus*, *diplobacillus* and the *bacillus influenzae* is a simple matter, but not so with the meningococcus. The latter can only be diagnosed by careful cultural examination. All Gram negative diplococci in conjunctivitis in meningitis cases are not meningococci, as from Axenfeld's clinic last year was reported the finding of the *micrococcus catarrhalis* from a conjunctivitis in a patient with meningitis. Leaving out of consideration the Gram negative diplococci described by Bumm and those of Lingelsheim, the three Gram negative diplococci to be discussed in differentiating conjunctival micro-organisms are the gonococcus, the meningococcus and the *micrococcus catarrhalis*. The differentiation between these three has been carried out in our cases by a comparison of the following points: Growth by room temperature, growth on plain agar, haemoglobin agar, gelatine, Loeffler's blood-serum, potato, bouillon, Litmus milk, a comparison of their action on the sugars and a comparison of their length of viability.

Where Gram negative diplococci grow by room temperature and are viable on plain agar for weeks or months, the gonococcus and the meningococcus are excluded. The *micrococcus catarrhalis* is so easily differentiated the question comes to be really a decision between the gonococcus and the meningococcus. In the initial tube a growth of the meningococcus upon plain agar is not rare, whereas a growth of the gonococcus upon this medium is. Upon haemoglobin agar they each