by the most powerful microscopes. This diplococcus can very well be cultivated in different nutrient soils, whereas gonococcus can only be cultivated in serum of blood; in other nutrient soils it does not grow. The diplococcus of trachoma has its seat inside the trachoma follicles, but outside the cells; whereas gonococcus lives in the cells or at the outside of the conjunctiva—at least, does not enter deeply into this membrane. Diplococcus of trachoma cannot be successfully inoculated into the conjunctiva of rabbits; but it is said that it has more than once been successfully inoculated into the human conjunctiva. Gonococcus, one of the most dangerous microzoa of the eye, is very easily transferable to the mucous membranes of any animal. As to the treatment of trachoma, a variety of drugs has been successively recommended, but sulphate of copper is the one that is most generally in use. In comparison with nitrate of silver, it may perhaps be preferable, because it is less energetic, and does not act so superficially. Its action certainly proceeds deeper into the tissue, and may, therefore, be better adapted to reach the diplococcus, which is seated, not on the surface, but in the follicles of the conjunctiva. The method of squeezing, or cutting, or scratching out the follicles has practically proved useful, and is, bacteriologically, quite correct.

Sacculus Lacrymalis.—The lacrymal sac is like a reservoir for the fluid secreted by the conjunctiva. This fluid, always more or less loaded with micro-organisms, is stopped by the least impediment on its way to the nose, the sac being thus stuffed with microzoa. Fortunately, they may not be altogether pathogenic; but some, or a great part of them, being pathogenic, it will be a very dangerous collection in the neighbourhood of the eye. When the sac is filled up, the outlet to the nose being closed, the fluid may occasionally regurgitate into the conjunctiva, and may greatly endanger its safety, being innocuous only when it contains non-pathogenic organisms alone. The presence of a stricture in the lacrymal duct, and a filling up of the lacrymal sac with matter, has long since been considered a dangerous complication. Practically, it will always be advisable to pay great attention to this complication, the relative quantity of pathogenic and non-pathogenic microzoa being variable. The least wound of the cornea, the least loss of its epithelium, as well as any operation, opens a way into the deeper layers of the cornea, and allows of the entrance of micro-organisms. The result of this, if the microzoa are pathogenic, will be a grave suppuration.

There exists a form of keratitis, called *ulcus serpens* and *keratitis-hypopyon*, the dangerous course of which, well known to the profession, can hardly be explained except by infection.

Keratitis mycetica.—The first time we met with the word *keratitis mycetica*, which means inflammation of the cornea, caused by micro-organism, was in the year 1875. At the ninth meeting of the Ophthalmic Society, Professor Horner, of Zürich, demonstrated the cornea of a patient, who died in consequence of facial erysipelas, having suffered in the last days of his life from a large ulceration in the lower part of the cornea. The microscopical sections of this cornea seen with the naked eye showed a great number of fine straight lines running out from the ulcer in a centrifugal direction; seen under the microscope, this network of straight lines proved to be dilated lymph canals of the cornea filled with numerous minute spherical bodies, all of about the same size. The members of the Society who were present were persuaded that this case was really of a mycetic character, and that the spherules seen in the cornea were specimens of the coccus of erysipelas.

There are still other diseases of the eye probably depending on parasitical infection. Microzoa have been found in a chalazion; they have been seen in the internal parts of the eye—in the iris, in the choroid, in the ciliary body, in the optic nerve; local and general tuberculosis has been successfully produced by inoculating the bacilli of tubercle into the anterior chamber of a rabbit's eye; it has even been attempted to prove that sympathetic inflammation is produced by the wandering of micro-organisms along the optic nerve and through the chiasma to the other eye; but all this is not yet sufficiently explained, and much laborious and long-continued work is still required. Bacteriology is at the present time a very young and incompletely developed science; it cannot yet answer all the numerous questions arising every day. The result of all this long-continued work may be that some day the etiology of human diseases and bacteriology will be found to be nearly identical sciences. Everywhere one finds micro- and macrozoa persecuting, vexing, and killing each other; everywhere one finds parasitism, and, in the material sense of the word, the human race itself is nothing less than a parasite on the surface of the earth. To save his own life, to nourish his own body, the human being destroys and kills every creature—plants as well as animals—if he deems it proper for his own welfare. And he is allowed so to do by the words of the Holy

Bible. This state of things in the material world corresponds exactly to what your great philosopher Hobbes calls

"bellum omnium contra omnes."

But in a moral and intellectual sphere this sentence is out of place, and has to be altered into

"pax omnium inter omnes,"

for in the moral and intellectual sphere there exists no personal interest, no parasitism; the individual being an integral member of the great body of mankind, and having, as such, to seek for knowledge of the works of our Creator, and consequently to admire and to love Him.

THE DIAGNOSIS OF URÆMIA FROM APOPLEXY.

By C. W. SUCKLING, M.D. LOND., M.R.C.P.,
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CHAUTERNESSE and Tenneson, in the *Revue de Médecine*, November, 1885, relate cases of partial epilepsy and hemiplegia in Bright's disease which they have, by *post mortem* examination, proved to be due to local oedemas of the brain.

I believe that it is not generally known that hemiplegia occurs in uræmia, thus occasionally making the diagnosis between uræmia and apoplexy an extremely difficult one. As in uræmia the treatment must be one of active interference, while in apoplexy the opposite holds good, the diagnosis is of the utmost importance.

I have recently met with two cases similar to those reported by Chauternes and Tenneson. A man aged 40 was recently admitted into the workhouse infirmary in a comatose condition, with right hemiplegia and without convulsions. The pulse was of high tension, the heart considerably hypertrophied, and there was a trace of albumen in the urine.

All these symptoms were compatible with the diagnosis of cerebral hæmorrhage. To my astonishment, he recovered consciousness immediately after being bled, the hemiplegia passing off in a few hours.

During his stay in the infirmary, he had five other attacks, which were always preceded by delirium and restlessness, together with violent convulsion of the right side of the face, right arm and leg, and conjugate deviation of the eyes to the right, giving place to hemiplegia, the eyes then being turned to the left. Each attack was cured by a small bleeding. The urine in this case was free for days from albumen, though it was tested at various periods of the day.

The other case was that of a woman, aged 62, brought in one evening completely comatose. There was right hemiplegia, conjugate deviation of the eyes to the left, dilatation of the right pupil, and abolition of the right conjunctival reflex.

The breathing was of the "Cheyne-Stokes" type, the heart a little enlarged, but the pulse of low tension. Clonic spasm of the facial muscles occurring at short intervals, the case was suspected to be uræmic, though the urine apparently was not albuminous, and I ordered her to be bled. One ounce and a quarter were drawn, and she became conscious almost immediately after.

The next day the hemiplegia had disappeared, but she had sensory aphasia, there being "word blindness" and "word deafness." Free purgation was kept up, and within two days she was perfectly well.

On testing the urine by daylight, I found there was a slight trace of albumen present, the quantity of urea being only 1 per cent., and the average daily quantity of urine passed being forty ounces. I could discover no casts, and there was no change in the fundus oculi.

In both the above cases, the temperature was a little below normal; and in both no history of the onset of the attack could be obtained, the patients being brought in from the street by the police. In the diagnosis of these cases, the occurrence of convulsions is of great assistance. A convulsion occasionally occurs at the onset of apoplexy, but is rarely repeated, while in uræmia convulsions are common, and usually frequently repeated; any elevation of temperature would be strongly in favour of apoplexy. In all cases, when in doubt between apoplexy and uræmia, I should bleed.

CONSUMPTION HOSPITAL, BROMPTON.—At the last quarterly meeting of the governors, the following legacies were announced: Miss Sprott, £300; Miss Cayley, £50; Miss Nightingale, £1,000; Rev. W. H. Edmeades, £50; Miss Keating, £20; Mr. G. K. Smith, £100; Mr. C. G. Du Pré, £300. The number of patients admitted since August 5th was 514; discharged, many greatly benefited, 396; died, 86; new out-patient cases, 4,082.