

of a great deal of German "frightfulness." Our better knowledge of war hygiene, the improved arrangements for conveying the wounded from the battlefield to be dressed at the clearing and Base Hospitals, the adaptation of motors instead of the use of horses, the presence of nurses as near as may be to the Front, all these combined, have proved of inestimable value in saving the lives of our men. We have indeed improved since the days when an official bug catcher, receiving the same salary as a surgeon, was a necessity!

MEDICAL ARTICLE.

By MAJOR MACPHERSON, I.M.S.

(continued from page 91.)

A morning at the Out Patient Department of the Sir C. J. Ophthalmic Hospital, Bombay.

PART II.

3 The next case is one of trachoma or granular lids. The eyeballs are injected, the lids are thickened, the eyelashes are rubbing on the cornea, the cornea instead of being clear and bright is dull and covered in its upper half with a number of bloodvessels. Trachoma is the most common disease we meet with in the East. In Egypt about 76 per cent of the population are affected with it. In our climate it accounts for about 25 per cent at least of our cases. In England it is rare and occurs chiefly amongst the Jews in the East End of London. It abounds wherever the sanitation is in a backward state and where there is overcrowding. The germ which causes it has not yet been discovered. At first it attacks the lids, leading to much swelling of the conjunctival surfaces, which instead of being smooth become rough; this is most marked in the upper lid, and therefore in the East it is very important always to evert this lid. The thickening is not confined to the conjunctiva alone but the tarsal plate or cartilage of the lid is also affected. After a time cicatrization of this thickened tissue takes place; and the result is a turning in of the edge of the lid (Entropion) and so the eyelashes rub on the cornea, even before this deformity arises the cornea may become affected; the upper half as a rule becomes cloudy and the bloodvessels are seen running over it, this is called pannus, and is at first superficial. If the case is treated early, this disappears and no opacity is left. Ulcers are very common at the lower edge of the pannus and it is often their occurrence that first brings the patient for treatment so long as there are no ulcers there is not much pain.

Treatment.—Wash out the eye daily with 1—5,000 H. P. Solution and touch the lids with silver nitrate, grs. X to the ounce. When the discharge has disappeared solid copper sulphate is applied to the lids. When the edges of the lids are turned in, an operation is necessary. When ulcers are present, in addition to washing and applying silver nitrate atropine is instilled.

4 The next case is a young man of twenty-six who has a painful and injected eyeball, there is no mucous discharge, only a watering of the eye. In looking carefully at the eye one sees that the iris is muddy and the pupil contracted and irregular, there is no increase in the tension of the eye. This is obviously a case of iritis. On enquiring we ascertain that the patient contracted syphilis five months ago. Iritis is one of the commonest and earlier secondary complications of this disease, you must be careful not to mistake this for conjunctivitis, this unfortunately is a mistake which is very commonly made even by doctors; some cases are difficult it must be admitted to diagnose. It is most important that a correct diagnosis be made early, otherwise the results will be disastrous. If the case is left untreated the iris gets bound down to the lens and the pupil gets more or less obliterated and so vision is seriously affected. Besides you may later get Glaucoma or high pressure of the eye, and this completely destroys vision.

Treatment will be local and constitutional.

Local. (i) Instil 1 per cent atropine four times morning and evening at intervals of two minutes, if the case is a severe one; otherwise four times in the morning. Atropine dilates the pupil, by paralysing the sphincter of the iris and also paralyses the ciliary muscle. The ciliary muscle is the mechanism by which the lens of the eye is focussed for different distances. Atropine, in fact, acts in the case of an inflamed eye just as a splint does in the case of an inflamed joint.

(ii) Hot fomentations usually give great relief.

(iii) In severe cases 3 leeches applied to the temple often act magically in reducing the pain and inflammation. Blistering only worries the patient and had better be avoided.

Constitutional.—As syphilis is the commonest cause, antisymphilitic treatment is most important.

Gonorrhœa, rheumatism and bad teeth may also cause this disease and the constitutional treatment will be ordered accordingly.

5 The next case is that of an old man of 65 who complains of a very severe headache on the left side, the pain is so acute as to have led to vomiting. The eye is injected, the lids slightly swollen and the pupil dilated. On palpation one finds the eye is very hard. This is obviously a case of acute Glaucoma. In this disease the internal pressure of the eye is very considerably raised. Unless this pressure is relieved, the optic nerve is sooner or later destroyed and incurable blindness is the result. In the case before us the pressure is very high and the attack has come on somewhat rapidly. Anxiety and worry in a patient who is predisposed to the disease often precipitate an attack. In some cases the onset is very gradual and insidious and the pressure is not so high. All the same in such cases the patient becomes slowly but surely blind. These chronic cases are very often mistaken for cataract with disastrous consequences.

Treatment.—An operation is required in all cases. In acute cases prior to the operation, hot fomentations, leeches to the temple and the instillation of 1 per cent Eserine solution can be tried, but operation must not be delayed

for more than 48 hours. On no account must atropine be used as it will increase the severity of the pain and other symptoms. As a rule chloroform has to be administered for the operation.

6. The next case is an old Hindu woman who is led in by her son. She is totally blind. On inspecting her eyes you see that the pupil is quite white in both eyes. There is no pain and no redness. The pupils react to light. This is a case of double cataract.

Cataract is a disease of the lens of the eye. The lens in health is quite clear. When it becomes opaque we say the patient has got cataract. It is most common amongst old people. The first symptom is slight dimness of vision. This goes on increasing until the patient cannot see. If we examine the eye we find in the early stages certain opaque spots or streaks in the lens. These increase until the whole lens becomes opaque. This is a very curable disease and requires operation. The whole opaque lens is removed and the patient is given strong glasses. After the operation the patient can see with the aid of glasses very well usually. The glasses make up for the loss of the lens. Instead of having a lens inside the eye, you have now a lens in front of the eye in the form of spectacles. The bulk of the indoor patients in our hospital are ones, who have been operated upon for this disease and therefore most of the work of the nurses has to do with such cases. A few points therefore in regard to the handling of such patients by nurses will not be out of place here. After an operation pads of wool enclosed in gauze are applied to both eyes and both eyes are bandaged. This is done in all cases even when only one eye has been operated on. The reason why we bandage the sound eye as well, is that you cannot move or use the sound eye without also moving the eye that has been operated on. Both eyes always move together. After twenty-four hours the pads are carefully removed, the mucus which has collected at the edges of the lids is carefully wiped away with a small piece of lint soaked in 1—1,000 H. P. lotion and rung dry. Then the eyes are opened carefully and inspected. In opening the eye it is most important not to touch the eyeball with the finger, otherwise the wound will bleed and the eye will become filled with blood. This mistake is often made by inexperienced nurses. To open the eye one ought to put one finger on the eyebrow and the other on the cheek. By pulling on the skin in these regions the eyelids are separated and no harm is done, the wiping off of the mucus must also be done gently. Atropine 1% solution is instilled into the affected eye four times usually at intervals of two minutes at the first dressing. The same process is repeated for about ten days, lessening the atropine however as a rule. The sound eye is kept bandaged for three days, and the affected eye for six days, after that a shade is given, on the seventh day the vision is taken and if there have been no complications the patient is discharged on the tenth day. After two months he is given his glasses. This is the routine procedure adopted at this hospital, but of course other hospitals have their own methods.

7. The next case is a new born child. The eyelids are very swollen; on separating the lids gently pus wells out. This is a case of acute gonorrhoeal ophthalmia, one of the most severe forms of conjunctivitis. It occurs in the

new born most commonly, but also occurs in adults, it is usually due to gonorrhoeal infection. Although it is most common in the new born, it is not so severe and is more amenable to treatment than it is in adults. Fortunately considering the prevalence of gonorrhoea amongst men and women, it is comparatively a rare complication in adults. The newborn child gets infected in the passage of the head through the vagina. Hence the importance of carefully cleansing the eyes of the newly born. In all cases besides washing out the eyes with 1—5000 H. P. Lotion, a few drops of silver nitrate grs. X to the ounce, should be instilled. Prevention is better than cure. The disease in young children usually makes its appearance about two or three days after birth. The eyelids become intensely swollen, and all their wrinkles disappear. At first there is only a slight discharge meat juicy in colour. As the disease progresses, this is succeeded by a thick yellow discharge and this is the stage we usually see at the out-door department. The great danger of this disease is that the cornea may become ulcerated and be destroyed and in this way vision lost. If the treatment from the first is carried out energetically, as a rule, no harm results to the cornea. In all cases it is most important to see the cornea. This is not always an easy matter. The child cries and you get a spasm of the lids and you cannot separate the lids, as a rule, therefore, we have to separate them by means of retractors, sometimes even this will fail, and then we may have to put the child under a general anaesthetic. In any case the cornea must be seen.

Treatment.—The eye must be washed out by means of an irrigator with 1—8,000 H. P. Lotion every two hours. In the very early stages where the swelling of lids is very great, hot fomentations applied will give great relief. When the discharge has become more purulent in addition to the washing out with lotion the conjunctival surfaces of the lids should be painted with silver nitrate ten grains to the ounce, the painting is carried out by means of a little wisp of cotton wool wound round the end of a piece of stick or a glass rod. After one application of silver a marked improvement usually follows. The edges of the lids should be smeared with vaseline to prevent them sticking. No bandage is to be applied. Where the cornea is involved, atropine must be instilled into the eye. Some cases are very severe, while others are comparatively mild. In all cases of purulent conjunctivitis even when the cause is not the gonococcus, the application of silver solution is beneficial. It is our sovereign remedy in most conjunctival affections. In dealing with such cases it is very important that nurses should see that none of the discharge gets into their own eyes. They must therefore carefully disinfect their hands after touching the child. If by chance some pus should spurt into one's eye, one must have the eye washed out with lotion, and some drops of silver instilled. Often nurses and doctors have lost their eyes, in consequence of infection in such cases.