THE BRITISH JOURNAL
OF
OPHTHALMOLOGY.

FEBRUARY, 1917.

COMMUNICATIONS.

SOME ECCENTRICITIES OF INDIAN OPHTHALMIC
PRACTICE.*

BY

R. H. ELLIOT,
LONDON.

AFTER many years of practice in India, I had become so accustomed to the nature of my surroundings that their strangeness did not strike me, and I had learnt to accept things as I found them in my daily life. When, however, during my later years, I had the privilege of receiving distinguished visitors from many parts of the world, my attention was arrested by the extraordinary interest they took in matters which to me had become the routine happenings of an exiled existence. Kipling, the Poet of Empire, has sung that :

" The strangest things of Kew, are the facts of Khatmandhu,
" And the crimes of Clapham chaste in Martaban."

It seemed possible to me that it might interest you to hear something of the daily experiences of an Indian surgeon. I do not pretend that the paper is exhaustive, or that it covers the ground. It is rather in the nature of desultory leaves from a notebook. The slides, which I am about to show you, were taken in the Madras Ophthalmic Hospital to illustrate a popular lecture, given under the auspices of one of the leading Student Societies of India, and presided over by the Surgeon-General with the Government of Madras. The object was to interest educated Indian gentlemen, and to secure their co-operation in the task of combating the wide-spread and

* Oxford Ophthalmological Congress, July 14th, 1916.

appalling ignorance on the subject of the treatment of eye diseases in India.

I shall confine myself mainly to speaking of the treatment of disorders of the conjunctiva. Some idea of the prevalence of such disorders may be gained from the statement that, during the epidemic seasons, I have seen in a single morning, 30, 40, 50, or even more cases of catarrhal ophthalmia, presenting themselves among the new cases at the Government Ophthalmic Hospital, Madras. When one remembers that this same kind of thing is occurring all over the land, one can see how difficult it is to form a true conception of the enormous mass of conjunctival disease prevalent in a country like India. On the other hand, the provision of suitable medical aid is still in its infancy, and it consequently is not strange, that a large part of the treatment passes into lay hands.

It is commonly believed that in India the woman is in a state of slavish subjection, and that she exercises little influence on the lives of her men folk. Such an idea is the outcome of the superficial observations of visitors of the stamp of Paget, M.P. In sickness and in health, the Indian woman is a factor to be reckoned with, as she is, and indeed should be, the wide-world over. Where doctors are scarcest, her responsibilities are greatest, and she does her best to rise to them without fear of failure. Most Indian wives and mothers have favourite prescriptions for the treatment of the commoner affections to which their families are liable, and there must be few indeed of them who are not prepared, when occasion arises, to deal with the widely prevalent catarrhs of the conjunctiva. Their remedies are very diverse. Some of them are comparatively harmless; for example, human milk, which especially when squirted into the eye straight from the breast, has a high reputation for healing power, and possibly has something to recommend it. Many of the other remedies are much less harmless; but to find the quintessence of danger, we must seek for it, not in the homes of the people at large, but in the "laboratories," if I may call them such, of the amateur village expert. Such specialists are usually old ladies, whose reputation as eye doctors rests largely on their weight of years. The idea that a man of 40 years must be either a fool or a physician is far wider spread than the land that gave it birth, and King Charles' witty, if offensive, comment, that a man might be both, is as true of one country as of another. Certain it is that the expert lady of an Indian village possesses an ignorance of her subject as colossal as her confidence in her own powers. Not for her, the trivial remedies of the wife and mother. She gathers her herbs in the right phase of the moon, and compounds them by means as devilish as her intentions are angelic. I am far from wishing either to blame or to disparage her. The highest award that the world has known was made to a

woman, whom many blamed, in the words "she hath done what she could." Doubtless the mercenary side of her profession may appeal to the Indian hag as it may even to the Western specialist, but we must at least concede that she does her best. Her confidence in her remedies seems unshaken by rude failures, a state of affairs which can only be explained by her colossal ignorance and her blind fatalism. "It is written on the forehead of certain of her patients that they are to 'go blind'; what can she do to alter the inexorable decrees of fate? Meanwhile, if they will sit down, she will place very precious medicine in their eyes." Few things struck me as more pathetic in India than the blind confidence of the people in "Medicine," spelt with a huge "M." It is illustrated by the attitude of those who visit the out-patient rooms. A man has travelled hundreds of miles to see the great specialist, whose reputation has filtered through dark places to the remote corner of the earth in which his village lay far-flung in the eastern sunshine. He has begged or borrowed the means to take him there, or has spent the savings of a life-time on the journey, and at last he has reached the almost sacred precincts. He is met by officials, his name and many other details are registered; he is marshalled into a line, which fades ahead of him whilst it lengthens behind, until he reaches "the présence" at last. What is his mental attitude as he addresses the surgeon or physician "as his God, his father, and his mother"? Is it one of exaltation, or of excitement? Oh, no! it is just that which inspires him when he visits a shrine to which he has travelled to fulfil a vow:—a blend of ignorance, fear, confidence, and hope, lost, hidden, overwhelmed in the one great idea that so far as he is concerned, his part has been fully played. Has he not come to the man who gives sight like a God? What remains for him to do? Absolutely nothing! So strong is this idea that many of the illiterate patients can only with difficulty be induced to answer questions as to their condition and past history. To me they often seemed to expect the treatment meted out at a Chicago factory; they have entered at one end, supplicants for surgical aid; there remains nothing to be done till the great machine grinds them out "cured" at the other end: "Their's not to reason why." Such an attitude has many advantages to the surgical administrator, but it has obvious drawbacks from the patient's point of view. It is the spirit I have described, and the lack of medical opportunity, that explains the horrors of which I am to-day speaking.

I spoke of the village laboratory. Its roof is the sky, or possibly a leaf lean-to; its floor the sun-baked earth, and its tools the "mamoti," or Indian spade, of which Mr. Atkins is reported, in his national insularity, to have said, "What can you expect of a people that dig towards their own bellies?"

Here you see (Fig. 1) the process of manufacturing a medicinal preparation in being. On the back of the mamoti are being prepared, under the influence of fire, one of the very precious pastes or powders of the specialist. The common ingredients of such

FIG. 1.

preparations are the juice of the leaves of the tamarind tree (which is very acid and irritating), the juice of fresh limes (a small variety of lemons), alum, various kinds of pepper, iron filings, human milk, human urine, cow-dung (the cow being a sacred animal), ghee (or clarified butter), and a great variety of other substances. Each *savant* has a personal recipe for the preparation of his or her choice.

It is not difficult to imagine the amount of harm which can be done to an eye suffering from one or other form of conjunctivitis, by the insertion into the conjunctival sac of one of these very irritating pastes or powders. A most unhappy illustration of the harm done is furnished by the next picture (Fig. 2) which shows a family of three children, brought by their father from a far-away country district to the Madras Eye Hospital. A few weeks earlier these children had been attacked by some form of conjunctivitis; an irritating paste was applied, with the result that five of their six eyes were totally deprived of all sight, while the sixth retained but little vision. I have seen some sad things during the third of a century that I have been a student of medicine, but I cannot remember any that exceeds the pathos of that picture as I see it again to-day against a background

of Indian sunshine—a tall, thin resigned man, walking at the head of the procession of his three blinded children, who clung to the stick he held out behind him, and so followed each other in a line back to their hopeless home, resigned, submissive, uncomplaining, and

FIG. 2.

crushed. If the tragedy in this case seemed the more terrible inasmuch as the weight of it beat a whole family to the earth, it is but an illustration of what is happening day after day in many Oriental countries.

Before I pass on to speak of granular ophthalmia and its treatment by indigenous practitioners in India, I should like to say a word on another abuse of these same pastes and powders. In India, fevers of various kinds are rife, and not infrequently they run a severe course. To such a case the Indian vaidyan or medical man is called in, and if he finds the patient in a comatose or semi-comatose condition, he applies drastic means to restore him to consciousness. Should those means fail, both he and the patient's friends bow to the inscrutable decree of a stern providence. On the other hand, should the patient's recuperative powers pull him through, and consciousness show signs of returning, despite the well meant but evilly carried out efforts of the expert, the credit for the recovery is claimed by the vaidyan and unhesitatingly given by the grateful friends. Sometimes the methods, though drastic, produce no permanent ill effects, but there is one custom as common

as it is mischievous, of which nothing too bad can be said. It is that of introducing one of these irritant pastes into the conjunctival sac of a comatose patient, with a view to stimulate the brain by means of the pain thus inflicted, and so to restore the patient to consciousness. It is bad enough to insert such irritants into the eye of a conscious patient, who would at once do everything in his power to rid his conjunctival sac of the noxious mass. It is far worse in the case of an unconscious sufferer who makes no effort to get rid of the dangerous irritants, which consequently lie a long time in contact with his cornea. The latter membrane is frequently so severely damaged that it becomes permanently opaque; not seldom a portion of the corneal substance sloughs away, leading to protrusion of some of the contents of the eye, and the possibility of all the appalling consequences which follow so often in the train of such disasters. Look at the photograph (Fig. 3) now shown :

FIG. 3.

This woman carries her history written on her eyes for any intelligent student to read. You can see from the picture that the lower parts of her corneæ are totally destroyed, and replaced by cicatricial tissue, in which were to be seen the stains left by impacted uveal structures.

There is one condition with which these cases may easily be confused, and to which I would therefore like to devote a little time just now, *viz.*, the ulceration and consequent leucomata of the corneæ, dating from an old attack of small-pox. I am not prepared to dispute that a certain number of cases of corneal trouble following small-pox may be due to local pustules, but I am confident that the

great majority of cases one sees in India, which date their corneal trouble back to an attack of small-pox, are to be attributed to the results of exposure. The patient lies for hours, or even for days, on the floor of a dusty mud hut, in muttering delirium or in coma, with the eyes turned up; the lower part of the cornea and the adjacent conjunctiva are, consequently, exposed to the desiccating influences of wind, dust, and heat, and to the insults of flying creatures of many forms, and this too at a time when nutrition is at its lowest ebb. The man who fails to appreciate these facts clearly, never gets the hang of the picture presented to him day by day in the Eastern out-patient room, whilst the observant student of the hand-writing on the damaged eye, will often be in a position to tell his patient of happenings in her hazy past, in a way that might well claim the envy and admiration of a fortune teller.

It will be understood, from what has already been said, that we have a ready explanation, on physical grounds alone, for the fact that the lower part of the cornea is most severely affected in these cases. A powder, or a stiff paste, will naturally remain in the lower *cul-de-sac*, and will there do its work with comparatively little interruption. The vaidyan and his imitators do not, however, confine themselves to pastes or powders. Instead, they sometimes instil into the eye one or another variety of drops, some of which are intensely irritating, whilst others owe their potency for mischief to the organisms they contain. Amongst the latter may be classed human urine. One case stands out prominently in my memory. It was that of a wealthy and highly-educated Burman, who was advised to wash his eyes with his own urine. He did so, and practically lost the sight of both thereby, for his urine contained gonococci. I have seen a similar accident as a result of washing the eyes with virgin's urine, a far from uncommon practice. Again, I have been told by trustworthy Indian practitioners that many of the midwives make a practice of washing the infant's eyes in the mother's urine immediately after birth. Shades of Credé! Is it possible that an informant was correct when he whispered to me that such atrocities are not unknown even in the British Isles?

Fig. 4 will show the havoc that irritating and bacteria-laden fluids will wreak upon the eye.

It will be of interest to leave this topic for a moment and to pass on through time to study the after-results of these forms of treatment as we meet with them in the out-patient room. Huge staphylomas of the cornea are of very frequent occurrence in the records of any large Eye Hospital in India. There is something uncanny in the appearance the patient presents. The lids frequently constrict the base of the staphyloma, the anterior portion of which then bulges through the palpebral slit in front of the skin surface. The mushroom-like mass weirdly follows every movement of either globe. Such an

appearance must be comparatively rare in Europe. In Madras it was so common that I had to request my assistants to cease collecting these instances of large staphyloma, as they were taking up more museum room than we could afford.

FIG. 4.

Fig. 5 illustrates the condition well, and the bottle specimens probably do so even better. I am indebted to Major H. Kirkpatrick for kindly allowing me to have these sent home, after my retirement from India.

Before leaving the subject of the treatment by Indian remedies of conjunctival diseases, there is a lighter side to which one may turn for a moment. For my information on it, I am largely indebted to one of my former medical officers, who worked under me in the Eye Hospital at Madras, Dr. Ekambara Iyer. There is an element of irresistible comedy in the serious recommendation that a disease of the eye should be treated by rubbing the sole of the corresponding foot with medicated oil. The effect is heightened by the explanation that the inunction "brings down the heat from the head." Still more amusing is the prophylactic treatment of presbyopia by burning the excreta of a rabbit to ashes, making a paste by mixing these ashes with butter, and daily rubbing the ointment into the eye.

A method of treating the corneal trouble by getting a friend to chew raw onions, and with his mouth full of the half-masticated mass, to blow on the affected eye, is actually in vogue. It reminds me of an arrangement I once obtained from Italy, by means of which

super-heated air was blown upon the eyeball of patients suffering from immature cataract. The distinguished inventor suggested that the maturation of the cataract would be hastened thereby, the principle being that supposed to underlie the formation of glass-

FIG. 5.

blowers' cataract. I cannot say that the "hot air" produced any effects on the cataracts, but it resulted in such apparent mortality amongst the relatives of the patients subjected to the treatment that I was constrained to abandon any further experiments in the same direction. I may be permitted to explain that when an Indian patient desires to change his doctor, he is too polite to state the matter crudely; instead he slays a relative, preferably a mother-in-law, with his tongue, and hastens away to bury her. I think that most Westerners would adopt a somewhat similar course under the influence of eye treatment by oniony breath. The only danger would be that they might, like Mark Twain, be inclined to provide the corpse on the spot, and select the surgeon for choice.

Now, a word on the treatment of granular ophthalmia, a disease which takes an appalling toll of human sight in India. I say very deliberately, and as a result of an exceptionally large experience in the treatment of this disease, that it should never be permitted to cause the slightest diminution in the acuity of a patient's vision if treated from the first. The pannus and keratitis of trachoma, with the subsequent clouding of the cornea, are all preventable, if the patient seeks relief early enough. When, however, he waits until the harvest has been gathered in, or until he can get friends to accompany him to the nearest hospital, or when, as not infrequently happens, he relies on home treatment until it is too late, the consequences are

most serious. It has been mentioned that scars of the lower part of the cornea are suggestive of exposure-ulceration, or of the introduction of irritating drugs into the lower *cul-de-sac*. Equally characteristic is the scarring of the upper part of the cornea conveyed to that area from a trachomatous condition of the upper lid. It is one, literally of the every day, nay more, of the every hour appearances seen in the Madras Out-patients' Room. Not a few of the cases present evidence of past treatment of a very drastic kind. Irregular black streaks in the substance of a scarred palpebral conjunctiva show where an energetic vaidyan, having scraped the part, has rubbed in some form of powder, which has usually been burnt beforehand. Deep elongated cutaneous scars running parallel to the lid-edge testify to past cauterisations, made with the red-hot iron, and aimed to secure eversion of the lid-edge. Sometimes these are fairly successful, but in a number of cases, the cauterisation either fails to produce the desired effect, or else destroys too much tissue, with unfortunate results. Deeper and more extensive scars, stretching across the forehead from temple to temple, bear witness to violent and often ineffectual efforts made in the past to secure counter-irritation.

Those who wish to evade an unpleasant duty in India not infrequently do so by dropping some form of irritant into the conjunctival sac. The most commonly used substance is "chunam" or lime. The walls of every Indian house are periodically washed over with chunam instead of being papered. The malingerer has, therefore, a very short distance to go for the irritant which he requires. He scrapes a few flakes from the wall with his knife, powders them between his finger and thumb, draws down the lower eyelid, and drops in the irritant. Half an hour later he presents himself before his employer with abundant evidence of catarrh of the eye. This trick was very freely resorted to in Madras by the police. Latterly they were inclined to discard it on account of the "devilish cunning" displayed by the staff of the Ophthalmic Hospital in detecting the ruse. The diagnosis is really very simple, for although actual particles of lime can seldom be found in the conjunctival sac, the appearances presented are characteristic, since an acutely catarrhal condition of the lower *cul-de-sac* is associated with a practically normal appearance of the upper portion of the conjunctiva, a phenomenon completely at variance with what is observed in ordinary catarrh. The milky surface of the inflamed membrane is another point to which the attention of any one interested should be directed. The same method of malingering is adopted by sepoys, convicts, and others. Major H. Kirkpatrick told me of a case which came under his notice in the Andaman Islands, in which a convict, desirous of escaping work for a few days, made use of chunam. Unfortunately, he overdid the dose, with the result

that he lost all vision in both eyes. I have never seen quite so extreme a case, although I have met with instances in which the malingerer accomplished much more than he set out to do. In this connection Fig. 6 is of interest, as it shows a double symblepharon produced by dropping an irritant into the lower *cul-de-sac*.

FIG 6.

A word as to the astrologer and the part he plays not only in Indian but also in European medicine. Most educated Indians, before entering upon any large undertaking, have their horoscope cast, and consult an astrologer as to the wisdom of the course they propose to pursue. It is not wise to ignore or to despise the influence of these men. Should they give an adverse opinion the patient will either refuse an operation, or will postpone it to what he terms a more favourable time, which, being surgically interpreted, may mean a much less favourable time. Again, the astrologer will tell the patient that the operation should be performed at a particular time. There are certain hours of every day in India which are favourable for the inception of new enterprises, and there are others in which the powers of darkness are reputed to be abroad in such force that it is most unwise to embark on a new undertaking which their malign influences might wreck. Whilst I am opposed to humbug in all forms, I saw very early in my Indian career the very great importance of having my patients' confidence. If a man thinks he is going to do well, he, consciously and unconsciously, assists his medical man; whilst, on the other

hand, the dread of impending misfortune hanging over a bandage-blinded patient may be productive of the worst possible psychical results. I therefore always endeavoured to meet a patient half-way as to the times and seasons. It required very little tact to get the astrologer to fix as the favourable time for operation that most convenient to the surgeon, and so to ensure that the patient embarked on the wearisome time before him with his hopes and confidence high. This is, I believe, the practice of all surgeons in the East.

A form of superstition constantly met with, and deserving of much less sympathy, is that in favour of the use of indigenous drugs. The objection to them is that the preparations are crude and unstandardised to the last degree. Against the employment of such, I steadily set my face. Unfortunately, they are still used and advocated by some of those who should know better. As an instance of this, I may recall the case of a patient, who urgently desired that her medical man should use one of these drugs against my judgment and advice, given in consultation. She insisted on doing so in conjunction with the treatment I had suggested. Later she admitted that the preparation had been useless, but urged in extenuation of the failure, that the leaves had been collected in the wrong quarter of the moon. An Indian medical man, with a good western degree, had told her the right quarter, and she meant to try again. Such instances in which men with a Western education are concerned, are, I am happy to believe, rare, but the bare possibility of such an occurrence as I have mentioned, reveals the black wall of ignorance and superstition with which Western science has to contend in the East.

In conclusion, I would finish where all life begins, at woman, the eternal question of all climes and peoples. I have spoken of the astrologer, and of his influence in deciding whether operation or other treatment should be undertaken. Woman wields a greater, because a more universal, power still. A man will come for himself, or with his child, and seek advice; he will apparently be convinced of its correctness, and will then not infrequently decide that he must seek first "the advice of his women folk." One may rest assured beforehand that their verdict will be against any form of active treatment, and especially against operation. This is not surprising when we remember the secluded life many of these women live, and their lack of anything that can really be called education. The conditions of the East have determined that the training of women in new ideas should lag far behind that of their men folk. A movement for the training of women is now strongly on foot, and will have great results in the near future. Meanwhile, I do not wish to be misunderstood to imply that all Indian women are alike in this respect, for there are many exceptions. I am

speaking of broad tendencies rather than of individuals, and again it is possible that not a few of those who reject Western advice on the ground of "female opposition" are really hiding themselves behind the *sahri* (the equivalent of the petticoat). In other words, they are repeating the history that began with Adam's excuse in the Garden, that the woman tempted him and he did eat.

A CASE OF MULTIPLE ANEURISMS OF THE RETINAL ARTERIES.

(With coloured plate.)

BY

J. A. PRINGLE, M.D.,

CAPTAIN R.A.M.C.

ANEURISMS of the retinal artery, apart from those variations in calibre associated with arterial disease, are so extremely rare that I think it may be of interest to ophthalmologists if I report the following case at some length :

Case.

Private C. J., aged 23, service 7 months, was sent up to see me by the medical officer in charge of his base, as he had complained of some blurring of vision. On being questioned, he said he had first noticed that his sight was defective some eighteen months previously, that it was much better now than it had been, but that when he tried to use his eyes for close work, *e.g.*, to read a thermometer, the figures got blurred and seemed to move "up-hill." He also said that when he stooped and raised his head quickly, his eyes ached at the back, and that "discs" and "rings" seemed to float in front of him.

He was a fairly well-developed man, apparently healthy, save for a slight tendency to anæmia. There was no sign of thickening of the peripheral arteries. The urine was reported normal.

Family history.—Father alive ; said to have diabetes, but no eye trouble. Mother died of cancer. Four brothers and one sister, all healthy, and nothing wrong with their eyes, as far as he knows. No history of tubercle or syphilis.

Previous history.—Patient has always been healthy, no serious illness, no injury ; has never worn glasses. He started work as a miner when 16½ years of age, and worked constantly in the pits until two months before enlistment, when he went off work, owing to his vision becoming blurred, and things seeming to go round. The doctor told him then that he had nystagmus. He started work again about ten days before enlisting, and left work to join.