History.—The patient was a male Hindu, aged 60, a sturdy farmer. Twenty years before admission to hospital he had had gonorrhoea. Three years ago he was in the Bowring Hospital, Bangalore, for inability to pass his urine freely, but got no better. He was admitted under my care into the Victoria Hospital, Bangalore, on January 4th, 1902, in great distress. He said that for the past twelve months he had to pass water every half-hour in the knee-elbow position, with much straining.

State on Examination.—No stricture was found, but the prostate was considerably enlarged. Residual cloudy urine measured 4 oz. Cystoscopic examination showed that the lateral lobes of the prostate projected into the bladder with a groove between them, while from the lower commissure of this groove sprang a pedunculated globular tumour, about half an inch in diameter, which moved about freely in the water with which the bladder was distended.

Operation.—On January 18th I performed the enucleation. The bladder was opened without difficulty, but I noted that the vesical incision bled more than usual. I then caught up the mucous membrane on the ridge of the right lobe, and snipped off a fold, so as to leave a button-hole large enough to admit the tip of the forefinger. Through this opening, which proved very dilatible, I enucleated first the right and then the left lobe, using the left forefinger only as the enucleator, while the right fingers in the rectum assisted. The only difficulty experienced was when the anterior or upper ends of the prostate near the triangular ligament came to be enucleated; the finger seemed barely long enough to accomplish this part of the process. The small tumour seen with cystoscope came away with the right lobe. The bleeding by now had become very free. I washed out the bladder with hot boric lotion, inserted a drainage tube through the suprapubic opening, washed out the bladder again as some bleeding seemed still to be going on, and sent the patient to bed. There was no shock, and the operation lasted less than half an hour. About an hour or so afterwards, when I was engaged on another operation, I was sent for, as haemorrhage had again set in. I found blood flowing pretty freely from the wound, but on inserting my finger into the bladder wound, and pulling up the viscus, the bleeding stopped. I then inserted a Fergusson's speculum and examined the site of the enucleation wound. It was not bleeding. The blood was coming up slowly outside the speculum from the anterior aspect of the suprapubic wound on the bladder. I tied in a large-sized (1 in. diameter) Fergusson's speculum, which was firmly grasped by the bladder wound, and the bleeding at once ceased. Through this speculum a clear view of the base of the bladder was obtainable. The patient lost a lot of blood, and was quite blanched, but soon rallied. I removed the speculum in six hours, and reinserted the drainage tube.

Progress.—The bladder was irrigated daily with boric lotion for a fortnight or so. The wound was completely closed by February 11th. By February 26th he could retain his urine for four hours. There was $\frac{1}{2}$ oz. of clear residual urine. When the lobes of the enucleated prostate were placed in position the transverse measurement was $2\frac{1}{2}$ in. The weight was 1 oz. 5 dr. and 35 gr.

This prostate was, therefore, not a very much enlarged organ; still, it rendered life a burden, and the result of the operation was most gratifying, the patient leaving hospital for his duties in the fields strong and happy. It should be a rule never to allow these patients to leave the table till bleeding from every source has ceased.

The bleeding in this case had nothing to do with the enucleation. It was from the enormously thickened wall of the bladder at the anterior or lower extremity of the suprapubic wound. In another case I should be inclined to control the margins of this wound by passing a thick silk ligature through them, so that they could at any time be readily drawn to the surface and their condition examined.

I examined the prostatic site per rectum before the patient was discharged from hospital. There was quite a mass of indurated tissue. It felt, in fact, as if the prostate were still there, but mis-shapen. That it was not there, nor any tissue of any considerable thickness, was quite certain after the enucleation was completed, for with one finger in the bladder and the other in the rectum I palpated the site most carefully. I suppose the thickening I have described as felt by rectum just before the discharge was merely cicatricial tissue.

FURTHER REMARKS ON MYASTHENIA.

By SIR WILLIAM R. GOWERS, M.D., F.R.S.,
Consulting Physician to University College Hospital; Physician to the
National Hospital for the Paralysed and Epileptic.

To the three cases of myasthenia and ophthalmoplegia published in the *BRITISH MEDICAL JOURNAL* for May 24th, I am able to add a fourth. The patient was first seen more than two years ago, but I have been able to make a careful examination since the preceding article has been in print.

CASE IV.

A girl, now aged 14, was 12 when I first saw her. Her family is "nervous," but free from definite disease, either insanity or epilepsy. Healthy in early childhood, the symptoms of weakness began gradually at about 8 years of age, and were ascribed to an attack of influenza some time before,

but without evidence of a causal relation. The symptoms had slowly increased up to the time I first saw her, and have since undergone little change.

She is a tall girl, with conspicuous ptosis and consequent backward carriage of the head. The edge of the right lid is opposite the middle of the pupil, of the left rather lower. There is no elevation of the lids voluntarily or on attempting to look up. The orbicularis on each side contracts well and firmly (two years before the contraction of the right was less strong than the left). The frontales act well. The lower part of the face is much weaker on the right side than on the left, but there is no "nasal smile." The naso-labial furrow curves round the corner of the mouth in the same way on each side, but is much slighter on the right. The lips seem a little weak, but she can just whistle with an effort. Articulation is curiously slow and laboured; the only consonant distinctly imperfect is *b*. The tongue is protruded straight and appears normal. The voice is nasal; the palate raised but little, and liquids, when being swallowed, have occasionally regurgitated through the nose during the last six months. There has been throughout slight weakness of the adductors of the vocal cords (Sir F. Semon). The masseters contract firmly, but the right distinctly less than the left, just as the right side of the face moves less. No evidence of exhaustibility can be obtained, but she habitually masticates imperfectly.

The movement of the eyes upwards is defective. Two years ago hardly any movement was perceived, and still there is very little in the right, and in the left only about a quarter of the normal. Movement downwards is fair, but hardly normal. The same is the case with each of the lateral movements, and they are the same in the two eyes. In spite of the fair action of each internal rectus with the opposite external rectus, convergence is absent. On an attempt, the right eye remains in the mid position, and there is only a doubtful, very slight movement of the left eye. Yet accommodation seems good; she can read the smallest test type at 9 inches and there is not definite myopia. The pupils are large and act well to light. The discs are normal.

The hands are very weak. The grasp is R. 2, L. 0 K°. In each the fingers can only be quite extended when the hand is in a line with the forearm, not when the wrist is over-extended (just as in Case 1). The general weakness of the hand is greater on the left side, as the grasp shows, and the muscles on this side are generally thinner than on the right, without definite local wasting. Excitability by the isolated faradic shocks is considerably less in the left hand than on the right. (The girl's distressing nervous sensitiveness made impossible any further electrical testing, or an attempt to obtain the myasthenic reaction.)

There is no distinct weakness of the legs; she can walk two or three miles, and has a firm seat on horseback. The knee-jerks are good and equal, but quickly diminish on repetition, until there is hardly any movement on the tenth successive tap. After a few seconds' rest it is as energetic as at first.

She has lately had two convulsive attacks at eight weeks interval, commencing with deviation of the head and eyes to the left, followed by general tonic and clonic spasm, equal on the two sides. The onset of each was attended by an indescribable feeling in the head and a visual sensation of a flame-like light in front of whatever she was looking at. During the interval she has had some typical minor attacks consisting in a momentary sense of strangeness and mental confusion.

On the whole, there has been little change during the last two years. An attempt was made to give strychnine by hypodermic injection, and it seemed to do good, but the injections caused so much emotional distress that they were discontinued.

REMARKS.

The case is of interest as presenting, like the others, ophthalmoplegia in addition to fairly typical symptoms of myasthenia, and in the fact that the peculiar "nasal smile" was not present. It is also of interest as one of those in which there is a marked difference between the two sides, especially in the face and hands, and in the association of slight atrophy of the muscles, and a diminution of electrical excitability, with the greater weakness of the left hand.

The impaired movement of the eyes resembles that in the

three other cases in being greatest in the upward movement. Of especial importance is the absence of the ability to converge the eyes in spite of the fair action of the internal recti on lateral movements. It is difficult to understand this symptom except on the assumption of a central affection. It may be compared with the fact that in Case I the left eye at one time only moved outwards when tested separately, not with the right eye, and also with the fact that in Case II the eyelids, which could not be raised voluntarily, were sometimes over elevated under the influence of interested attention.

Lastly, the development of epilepsy in a subject of myasthenia is very unusual. I have not met with any recorded instance. It is the more remarkable on account of the absence of any inherited tendency. Its rarity deprives it of much significance, since such cases of epilepsy developing *de novo* at this time of life are not unusual. Few diseases are mutually exclusive, and the attacks in this case may perhaps be associated with the extreme nervous sensitiveness rather than with the condition of myasthenia.

It is customary to include among collected cases of myasthenia a case described by Wilks in the *Guy's Hospital Reports* for 1877 (vol. xxii, third series, p. 54). There seems to me no justification for its inclusion. The patient died from bulbar symptoms, and apparently paralysis of the respiratory muscles or larynx—"quite unable to cough"—of three days' duration, after slight symptoms of general and bulbar character lasting a month. Their feature was slowness, as if due to "lethargy from want of will." There was slight strabismus, but no mention is made of ptosis. No morbid change was found. The case seems to resemble diphtherial paralysis more than myasthenia. There is no evidence that preceding sore throat was inquired for.

FURTHER REMARKS ON FINSEN'S LIGHT AND X-RAY TREATMENT IN LUPUS AND RODENT ULCER.

BY

MALCOLM MORRIS, and S. ERNEST DOKE,

F.R.C.S. EDIN.

M.B. CANTAB.

Surgeon, Skin Department, St. Mary's Hospital; Clinical Assistant, Skin Department, St. Mary's Hospital.

IN the BRITISH MEDICAL JOURNAL of February 9th, 1901, p. 326, we gave an account of our experience of Finsen's method up to that date. It may be useful if we now give a further record of our experience—now extending over two years—of its utility and its limitations. Such a report is likely to be more valuable owing to the fact that there has of late been a tendency to exaggerate the possibilities of the light treatment, and to employ it to the exclusion of all other older and well-tried methods. It is only by a plain statement of facts that we can enable those who have no personal experience of the treatment to estimate it at its true value, and assign to it its proper place in the therapeutics of the diseases in question.

We may, therefore, say at once that although in our opinion the results we have obtained have fully justified the employment of the treatment, and in some cases no other treatment could have produced such good results, we do not regard it as the only method to be used in all cases, nor advocate it indiscriminately to the exclusion of other methods. But when used judiciously, and combined, if necessary, with other means, we may perhaps claim for it the first place in the treatment of the majority of cases of lupus vulgaris. In regard to cosmetic effects it certainly stands first, while in reliability it yields to none, practically all the cases we have had under treatment have made a steady improvement. In regard to permanency of results, however, we are inclined to reserve our opinion as to its superiority over other forms of treatment. That relapses have been common in our experience when the disease has not been entirely eradicated is only too true. The patient must be kept under constant supervision, and the recurrent nodules treated without delay as they make their appearance. These relapses are due largely to the fact that it is difficult to be certain when the part has had sufficient treatment for the disease to be completely extirpated.

If it were not for this constant supervision and repetition of the treatment, the disease would soon regain its hold, and a still more extended experience is necessary before we can say that phototherapy is more permanent in its results than other measures. On the other hand the fact that applications of the light rays can be made over and over again without injuring the tissues and with improvement rather than deterioration of the scar is in itself a strong argument in favour of this form of treatment both for lupus and rodent ulcer, and as long as the patient is kept under observation and recurrent disease dealt with immediately on its appearance, the intervals between the recurrences become longer and longer, so that eventually a time may be reached when the disease is entirely eradicated.

Another point of importance is the fact that this treatment makes evident disease which was hitherto unsuspected, enabling the disease to be more thoroughly treated than by other methods. This may also account in part for the great length of treatment required.

Disadvantages of the Light Treatment.

The disadvantages of Finsen's method are now well known, the chief being the tediousness and length of time, the small area that can be treated at a time, the elaborate and expensive apparatus, and the large staff of attendants required. The French lamp of Lortet and Genoud, in which the rays are not concentrated but in which the patient is brought close to the source of light before it diverges, does away with most of these disadvantages. The rays, however, do not penetrate in the same way as when they are brought to a focus, and their action is too superficial. For this reason this lamp and the Danish lamp with water-cooled iron electrodes have been discarded in Copenhagen. We have found the French lamp of service in cases in which the lupus is superficial, and in extensive cases as a preliminary to treatment with the Finsen lamp, but not as a substitute for the latter. In the new Finsen lamp the principle is the same as in the old one, but it is modified in such a way as to make it applicable to one patient at a time, and the cost is thereby much reduced.

THE X RAYS.

Although we have found the *x* rays very useful as an adjunct to the light rays, we do not, except in certain cases, regard them as an adequate substitute. We have treated many cases with the *x* rays alone, and have formed the conclusion that in the majority of cases Finsen's method is more reliable, and apparently gives more permanent results. The effects can more easily be controlled, and the scar is better, for although a very good scar may result from the *x*-ray treatment, it seems to have more tendency to contract, perhaps varying with the severity and depth of the reaction.

This was well shown in one of our cases in which both methods were applied to different parts of the skin. The scar resulting from the *x*-ray treatment was more discoloured, denser, less supple, and more tense than the other, which was so fine and smooth as almost to resemble normal skin.

There also appeared to be a greater tendency to relapse in the scar, although the total number of applications was certainly less than that of the light. Although a larger area may be treated with *x* rays than by Finsen's method, it is not advisable to expose too large an area at once on account of the severity of the reaction; and for permanent or at all events rapid results, a reaction seems to be necessary. Pressure is of course not required in the treatment with *x* rays. The *x* rays seem to have a slight selective action on diseased tissues, but the healthy skin is also affected. Like the violet rays, they cause pigmentation and softening of scar tissue. They differ from the latter in their physical properties, in the fact that they cause loss instead of growth of hair, are not bactericidal, and in many other ways.

Advantages of X Rays.

In ulcerating cases the *x* rays are effective in so far that the ulcerations heal rapidly. In one of our cases a small ulcerating surface, which resisted treatment by Finsen's light, rapidly healed after a few exposures of *x* rays. For mucous membranes inaccessible to the light the *x* rays are very useful, and may be combined with Finsen's treatment in other parts. Notwithstanding the much greater penetrating power of the