

17th, seeing that, excepting the state of the pulse, the patient's condition was better than that of the morning; but, remembering seeing a case of hernia in which there were no definite symptoms of strangulation, but on operation the gut was found to be almost in a state of gangrene, I determined that the best chance for the patient was immediate operation: had I had the benefit of a clear history of the case at the time of admission, I should have operated in the morning, but not having that, I first tried the effect of an enema.

In conclusion, I have to thank my Assistant Surgeon Durgananda Sen not only for the great help he gave me at the time of operation in the above cases, but also for his attention to them after treatment.

### HYPNOTISM AND SUGGESTION.

By R. ARTHUR, M.A., M.D., EDIN.

THE subject of Hypnotism has excited during the last few years so much interest, especially in scientific circles, that I think a short account of it will not prove unwelcome to those medical men who are ever anxious to add to their weapons of offence against disease. As this article must necessarily be short, I only touch upon the history of the subject, and avoid indulging in any theories as to the nature of the hypnotic state, suffice it to say that, under the name of animal magnetism, it was introduced to the modern world about 1780, by Anthony Mesmer. Sixty years later, Elliotson, of London, and Braid, of Manchester, who invented the name of Hypnotism, used it with striking success in the treatment of disease, but were nevertheless denounced as charlatans by their contemporaries. For Indian medical men, it will be interesting to note that the Abbé Faria who came to Paris in 1814, and roused anew the curiosity about mesmerism which Mesmer himself started, had acquired his knowledge of the subject in India from the fakirs. Again in 1846, Esdaile, a surgeon in the service of the East India Company, employed hypnotism successfully as an anæsthetic in surgery. The Government was so struck by his results that they placed a small hospital near Calcutta at his disposal. He published a book—"Mesmerism in India"—in which are recorded more than 250 operations painlessly performed, among them being lithotomy, amputations, and removals of tumours. It was not till Liébault and afterwards Bernheim, of Nancy, investigated the subject that its claim to be a branch of the therapeutic art was allowed for a moment. Since then numerous observers, among whom are Charcot, Luys and Bérillon in France, Heidenhain and Moll in Germany, Van Renterghem and Van Eeden in Holland, Tuckey, Kingsbury, and Felkin in England, Forel in Switzerland and Delbouef in Belgium

have both studied and written on the question. The British Medical Association has appointed a commission on the subject and everywhere medical men are studying it and introducing it into their practice.

I shall confine myself to a description of the state, the various methods used in producing it, and a list of some of the disorders which have been successfully treated by means of it. It is not easy to give a satisfactory definition of hypnotism. It is a psychical state which presents many analogies to and some differences from natural sleep. Of what this state really is, or the ultimate cause of its production, little is as yet known. It seems as if a condition of inhibition of the higher cortical centres were brought about. This inhibition extends especially to the reasoning faculties, which in the waking state modify and control the play of the imagination. The mind undisturbed by ordinary stimuli from without is rendered much more susceptible to individual impressions which are forced upon it, and is, moreover, able to concentrate the attention upon an idea in a way impossible in the waking state. Hypnotism like natural sleep exalts the imagination and makes the brain more susceptible to suggestion. It is this susceptibility to suggestion which is the chief characteristic of the hypnotic state and the *raison d'être* of its use in therapeutics. It is for this reason that Bernheim, the chief authority on the subject, defines hypnotism as the induction of a peculiar psychical condition which increases the susceptibility to suggestion. This heightened susceptibility is the essential element. The hypnotic state *per se* is of little value in the treatment of disease, and only acts as a means of obtaining this increased susceptibility. Here lies the keynote to hypnotic treatment, and its discovery by Liébault raised hypnotism from the charlatanism of the Mesmerists and Animal Magnetists to the dignity of a science.

It is a popular impression, caused probably by the public exhibitions of Mesmerism, that the phenomena produced on the induction of the hypnotic state are constant, including the entire loss of will-power in the subject, and the possibility of any delusion or hallucination being raised in his mind. This mistake has had much to do with the disfavour with which both the medical profession and the public have hitherto regarded hypnotism. The truth is that only a very small percentage of persons show these phenomena when influenced. In the majority of cases the condition present is so different that the uninformed or sceptical observer usually concludes that the subject is only simulating the state. The reason of this is that there are various degrees of hypnotism of which the first mentioned state is the rarest and most pronounced. These degrees vary from the presence

of a slight drowsiness to a state of complete unconsciousness resembling somewhat somnambulism, and therefore called so. In this last stage delusions can be excited and various actions performed.

These degrees of the hypnotic sleep or hypnosis are generally classified as follows. (Liébault modified).

1. Drowsiness only, subject sometimes able to open eyes.

2. Drowsiness, with catalepsy more or less pronounced.

3. Greater somnolence with catalepsy more marked than in previous stage, and so-called automatic movements.

4. Imperfect somnambulism.

5. Somnambulism with amnesia on waking and post-hypnotic phenomena.

In the first three degrees, the subject is quite conscious though in a lethargic state. He remembers everything said to him when roused. In the fourth degree, consciousness is almost gone, and in the last is quite absent. Out of a hundred subjects, 20 perhaps will reach either of the last two degrees, 10 or 15 may be refractory, and the others will be divided among the other three classes.

*What proportion of persons can be hypnotised?*

—It is believed that 90 per cent can be influenced, but the proportion depends greatly on the skill and patience of the individual hypnotiser. Thus, while some observers have failed to influence more than 10 per cent of their cases, Van Renterghem claims to have succeeded in 95 per cent, and Liébault in 97 per cent in recent years. I have been successful in more than 80 per cent. Nearly every child between 8—14 can be influenced and the majority of them deeply. Old people as a rule are not easily hypnotised. Contrary to a current idea, the sex of the individual does not make any difference. Soldiers and sailors and others accustomed to the mechanical carrying out of commands are easily influenced, and for this reason, I believe, hypnotism would be very successful among the plastic races of India.

*Who can hypnotise?*—The popular idea is that there is a mesmeric or hypnotic power which only certain individuals possess. This power is or rather was (for now more accurate knowledge of the subject is being spread abroad) thought to be of the nature of some subtle fluid like electricity, hence the name of animal magnetism, which was bestowed on it by Mesmer. For the same reason, it has been called electro-biology. The Abbé Faria and Braid pointed out that no unknown force was necessary for the production of the phenomena. The cause of them was in the person who was to be sent to sleep. It was entirely a subjective matter. In reality a person hypnotises himself, the so-called hypnotiser being only the agent who sees that the neces-

sary methods are carried out. It follows from this that any one can hypnotise. This is so, conditionally to the person knowing the various necessary methods and being able to employ them in such a way as to inspire the confidence of the subject. The things which make one man a successful hypnotiser while another fails are dexterity and power to produce confidence. There is no such thing as one person hypnotising another by will power or some other mental force. Cases have been reported where persons have seemingly been influenced by others who have willed from a distance that they should. On investigation it has been found that the subject always knew when the hypnotiser was trying to influence him, and this idea in his mind was the real cause of the hypnosis. On other occasions a subject has passed into the hypnotic state because he thought his hypnotiser had willed him to be influenced, while, in reality, the latter had done nothing of the sort.

*Mode of Production.*—Various methods can be used. The one generally adopted is to direct the subject to gaze steadily at some bright object. The ticking of a watch, the gentle stroking of the face, making passes before it with the hands, or any gentle monotonous stimulation of one of the senses may be effectual. Dr. Luys at the La Charité Hospital at Paris uses a revolving mirror, by which he can influence a number of persons at once. Hypnosis may also be induced without any of such means—by the so-called psychical method. This consists in placing the subject in a comfortable position with the eyes closed, and suggesting the various symptoms of sleep to him. This method the one almost solely employed at Nancy and by those who follow the teaching of the so-called Nancy school may be called “hypnosis by expectancy or suggestion.” It is undoubtedly, when practicable, the best to employ, but it usually fails with English people. The method I have found most successful is a combination of these different ways. If possible, I first show the person I wish to influence another person passing into the hypnotic state. This is a great aid as it generally removes nervousness and calls forth the imitative faculty. I then place the subject in a comfortable position, either in an easy chair or lying down, and speak quietly to him, telling him what to expect, and the good I hope will ensue from the treatment. I then ask him to fix his eyes on my finger or a coin held a short distance from them. It is not necessary to strain the eyes unless the case prove obstinate. At the same time, I say quietly “your eyes are getting tired,” “you are feeling drowsy,” “your ideas are becoming confused,” and other suggestions of a like nature. In a minute or two the pupils dilate, and the eyes may close slowly. If they do not, I close them with my fingers. If the subject reopens them, I begin the fixation

again and continue it for a longer time. If they remain closed, I place my hand over the epigastrium and suggest a feeling of warmth there. If this comes, I know that hypnosis is present, however slight may be the degree. I then lift one of the arms and holding it in the air, say "your arm is fixed," "it cannot move." It may remain in this position showing the presence of catalepsy. It may be necessary, however, to repeat the suggestion several times before the limb stays in the position it was placed in. Catalepsy may also be induced in the legs, though it is never so marked as in the arms. Having once obtained catalepsy, I take the arms of the subject and revolving one round the other, say "you cannot stop your arms; they must go on moving." If the movement continues, the third stage of hypnosis is present. This is sufficiently deep for all therapeutic purposes. When the subject wakes, I ask him if he remembers what I said. If he does not, I know he has reached the somnambulistic stage. I then, if required, test to see if anæsthesia is present, or can be produced by suggestion. Having now obtained hypnosis, I proceed to give the suggestions which the case requires. If there is pain anywhere I rub the part, suggest warmth, and say several times, "the pain is going away, the rubbing is doing it good; it will soon be gone." In like manner fitting suggestions are made for whatever symptom is being treated. In some cases the suggestion may be intensified by applying the constant or interrupted current to the painful part.

*Rousing the subject.*—This in nearly all cases can be done by merely saying "wake up." The subject as a rule opens the eyes at once. It is better however, before rousing him, to suggest that he will feel quite happy and comfortable when he wakes and not at all sleepy. It is also wise to tell him not to wake till after you or he have counted ten. This prepares him for waking. If he is roused too suddenly, he may feel heavy and have a headache. If possible, it is better to allow the hypnosis to terminate of itself. This it will do, as a rule, in from half-an-hour to two hours. I believe this fixes the suggestions given more firmly in the mind. If there is any difficulty in opening the eyes, rub them gently and say "now you can open them." In some cases hypnosis cannot be produced at the first séance. It is sometimes necessary to make several attempts, and try various methods. Dr. Bramwell, records the case of a lady whom he failed to influence till the 68th séance. If the case is important, six or eight attempts should be made. Subjects are often only slightly influenced at the first attempt, and reach a deeper stage at subsequent séances. Others are never influenced deeper after the first time. When a subject is once hypnotised, the state is more easily and rapidly produced afterwards. In

treating cases, a cure is effected in some in one séance; in others, sittings extending over weeks or even months may be necessary.

*Dangers of Hypnotism.*—A word must be said about these. They have been greatly exaggerated. They are most dwelt on by those who have no practical knowledge of hypnotism, but who condemn the subject by an *à priori* judgment. Briefly these objections are, that hypnotism may produce unstable nervous equilibrium, hysteria, epilepsy, insanity and other ills. There is not the slightest evidence brought forward to prove that hypnotism scientifically used by medical men has ever done this, and those who have practised it are unanimous in asserting the groundlessness of these charges. The only real dangers are a possibility of acquiring a liability to pass easily into the hypnotic state, and the chance of assaults being committed on a hypnotised person. The first can be guarded against by giving the subject the suggestion that no one else but the operator can influence him, and the second by the ordinary means used when chloroform is administered, or a female patient examined. The possibility of crime being committed by a hypnotised person cannot be discussed here, but the chances of it are exceedingly small.

(To be continued.)

## A Mirror of Hospital Practice.

### MAHUBARI DISTRICT HOSPITAL.

CASES BY ASST.-SURGN. JAGAT CHUNDER DASS GUPTA.

*Case No. 1.*—On the 24th July last, Jaladharia, a Hindoo male, aged 40 years, was brought into this Hospital by his friends, with a *deep incised wound of the forehead*, which the friends of the patient attributed to having been inflicted by some robbers while the patient was sleeping on the veranda of his master's house at Janakpur, which he had to guard. I saw the patient and found him quite unable to speak and completely insensible, his clothes saturated with blood. I examined his wound, and found that his frontal bone was longitudinally divided almost to its whole length, extending from its top to its orbital plate; both the external and internal plates of the bone were divided, so that the bone cracked when pressed upon. The malar bone and eye-ball was also divided, and the contents of the eye had escaped; the right upper lip was divided too, and the right canine bone was broken. I did not make any further examination with probe to ascertain whether the internal contents of the cranium was wounded, as such examination was injudicious and dangerous. So without any further examination and without losing time I got the divided soft structures of the patient brought in apposition by horse-hair sutures, and then dressed the wound antiseptically.