

it is entirely unnecessary to bring about a hypnotic condition with amnesia, which, if repeated frequently, would undoubtedly have a bad influence upon the patient. This mild degree of fatigue is produced as follows: The patient, having been placed in a comfortable arm chair, is asked to think of nothing else than of going to sleep. We "suggest" to him that he is beginning to feel tired, that he is no longer able to completely open his eyes, which are already beginning to close, etc. At the same time he is asked to look steadily at two fingers of the hypnotizer, which at first are held directly in front of his eyes, but are gradually lowered, by which procedure the closing of the eyes, which we desire, is easily accomplished. Now either a difficulty in moving the arms or legs is suggested, a loss of sensation in certain parts of the skin, or some similar idea. The tone of voice in which all this is said should not be loud, but monotonous. The same suggestions must again and again be repeated, and care must be taken that disturbing noises, the slamming of doors or the striking of clocks, and such like, be not heard, so that the mind of the patient may as much as possible be concentrated upon the hypnotizer. Sometimes, but by no means always, the very first attempt to bring about hypnosis is successful, as I have seen in some of Forel's as well as Wetterstrand's cases, and the hypnosis may be so profound that we can already venture to give therapeutic suggestions. Sometimes the first, second, and third attempts fail completely or partially; then we must, if no contraindications exist, try again and again, but under no consideration should the individual trials be prolonged beyond two or three minutes. Without question external circumstances are of great significance. If a patient who is to be hypnotized enters a room, in which eight, ten, or twelve persons are lying sound asleep stretched out on easy-chairs and sofas, and is left sitting there quietly for a quarter of an hour without any attempt to put him to sleep, his suggestibility—that is, his susceptibility—will sometimes be materially increased, and it will be a comparatively easy matter to hypnotize him. But there are certain internal conditions also which may throw great obstacles in our way, and which must, therefore, not be overlooked. Thus, if a patient does not believe that he can be put to sleep, or if he makes up his mind to resist us, a certain amount of *finesse* is necessary; we have to outwit him in order to produce hypnosis without his consent or even against his will. Such

exceptions, and the behavior of the physician who has to contend with them, can not here be treated of. Only one artifice we may mention which we have repeatedly used with very good results in producing the fatigue quickly and surely. We apply a large curved sponge electrode (anode) to the forehead, a second to the neck, close the circuit and allow a very weak (constant) current, just sufficient to produce the characteristic taste upon the tongue, to pass through the head for a few seconds, and then, without the knowledge of the patient, open the circuit and tell him that the electricity passing through the brain will put him to sleep, and as a matter of fact this "suggested" current does so very promptly and surely. Secondly, the mental condition of the patient may stand in our way. It is an observation confirmed by all investigators that it is difficult or impossible to hypnotize insane patients, and that hysterical patients and hystero-epileptics are the least favorable subjects. In the domain of psychiatry the treatment by suggestion, so far as we can judge at present, remains without significance; on the other hand, it seems as if certain disturbances in nutrition—for example, general anæmia and chlorosis—facilitate hypnotization greatly, while an absolute confidence in the physician, the absence of all attempts to analyze and to test our procedures on the part of the patient while we are trying to hypnotize him, will also materially increase the susceptibility to suggestions. If all factors, favorable and unfavorable, are taken together, we may say that by far the greater number of people can be hypnotized; perhaps one might go so far as to say all, without exception, are susceptible if time and circumstances allow sufficient repetitions of the trial. For hospital practice the dictum of Bernheim may for the present be accepted, that the physician who does not succeed in hypnotizing eighty per cent of his patients for therapeutic purposes does not understand the method.

The manner in which hypnosis comes on and the phenomena observed during this state are extremely varied. Sometimes the eyes close suddenly and the patient is asleep at once; more frequently this is preceded by twitchings of the lids and moisture in the eyes, which are repeatedly closed and opened. Sometimes the lids are shut during hypnosis, sometimes a fine tremor is noticeable in them; again, fibrillary twitchings in the muscles of the face may be remarked. The hypnotic influence does not always produce sleep, and, as we have said, this is not

necessary for therapeutic purposes; but there are different degrees, from the waking state to slight dullness of the senses and somnolence, and, finally, deep sleep, which latter is called somnambulism. Bernheim in his explanation bases his arguments upon the ideas of Luys, that the different layers of the cortex are endowed with different functions: those nearest the surface are supposed to serve for the sensorium, the middle ones for the mental faculties, and the deepest for the transference of the will. He distinguishes accordingly nine degrees of hypnosis, and characterizes them in the following manner: (1) The patient remains quiet with closed eyes during the suggestion, but can open them without difficulty when asked to do so, and claims not to have slept at all. (2) The patient is not able to open his eyes when asked. (3) The patient presents suggested catalepsy and analgesia, and remains in the position in which he is placed, but is able, after it has been suggested to him, to change from one position to another without assistance. (4) The patient is no longer able by himself to overcome the suggested catalepsy, and automatic, rotatory movements, especially of the arms, can be evoked. (5) Besides the catalepsy, contractures can be produced which the patient himself is not able to do away with. (6) The patient presents an automatic obedience; he stands motionless if ordered to do so, he rises, walks, and acts, in fact, just as the hypnotizer may suggest. Intelligence and the activity of the senses are intact in these six stages. The patient on awakening remembers everything that has been done to him. (7) In the seventh stage the patient presents the same phenomena as in the preceding six stages, but on awakening has quite forgotten what has been going on. (8) Besides this amnesia on coming to, hallucinations can be produced during hypnosis which vanish after the return to the normal condition. (9) The suggested hallucinations persist after waking up—post-hypnotic suggestions—everything that can be produced in a patient when in a state of hypnosis can be brought about after he has awakened simply by suggesting to him during hypnosis that it will happen after he has awakened. In this possibility, of exerting an influence upon the patient for a longer or shorter time after he is awake, lies the whole therapeutic significance of the treatment by suggestion. This (post-hypnotic) action, which in certain cases can be obtained in no other way than by suggestion, is sufficiently important to warrant and insure to hypnotism a lasting place in science.

It is unnecessary to distinguish nine different stages of hypnotism as Bernheim did; three are quite sufficient (Forel). The first is the stage of somnolence, corresponding to Bernheim's first stage; the second is that of hypotaxia (light sleep), embracing all the stages from the second to the sixth of Bernheim; the third is the stage of deep sleep (somnambulism), corresponding to the seventh, eighth, and ninth of Bernheim's classification. It is of practical importance to note that frequent trials usually increase the susceptibility of the patient, and that as a result it is usually quite easy to produce the condition of fatigue ("somnolence") necessary for therapeutic purposes.

What are, then, the diseases in which we can, with good conscience and good hopes of success, venture to employ the treatment by suggestion? We need hardly say that affections in which we have to deal with inflammatory processes, new growths, infections, or, in a word, with organic lesions, do not belong to this class; and, as a matter of fact, it would hardly enter any one's head to attempt to cure pneumonia, typhoid fever, brain tumors, syphilis, tetanus, etc., by means of hypnotism. It is a different matter if we are dealing merely with certain symptoms of such maladies—for instance, insomnia, difficulty in breathing, or pains of the most varied kinds, not excluding the lancinating pains of tabes. Here hypnotism should, at least, be given a trial, yet the main field in which the treatment by suggestion should be employed will not be the diseases we have mentioned, but rather all those which we have designated and described as functional disorders of the nervous system. Here motor as well as sensory disturbances can be influenced, the latter having, *cæteris paribus*, a better prognosis. Neuralgias, especially tic douloureux, are often difficult to treat, and the migraine-like paroxysmal headaches can not always be permanently removed. Among the general diseases of the nervous system, epilepsy, the classical, hereditary migraine, and hysteria, as a whole, have a very unfavorable prognosis. On the other hand, certain individual symptoms of hysteria (the vagus-neuroses, anæsthesias, paralyzes) are very amenable to the treatment. Further details relating to this subject I have treated of in a paper read before the International Congress in Rome (Wien med. Presse, 1894, 22), to which the reader is referred. I would call attention again, however, to the treatment of alcoholism and of certain functional speech disturbances

(stuttering, stammering), since my results in these conditions were especially favorable.

According to Forel, it is possible to influence certain somatic functions to some extent—e.g., the menstruation and digestion—in such a manner that the menses can be brought on at a certain day and a certain hour, and a regular evacuation of the bowels every day can be insured by suggestion. Although these accounts come from the most indubitable source, the experiments must again be tested and confirmed. They can certainly only be successful, we should think, in individuals who have been repeatedly hypnotized and are, as it were, "trained." With the treatment of alcoholism by suggestion Forel also has had uncommonly good results in his institution. The heaviest drinkers were not only for a time, but lastingly cured; but no little influence certainly has here to be attributed to the temperance societies of which such individuals were led to become members. I have been able to obtain good results without this help. The behavior of morphinists toward suggestion requires further study. The results so far obtained seem not to be very encouraging. The communication of Wetterstrand (cf. lit.) that it is possible in idiopathic epilepsy to diminish the frequency and severity of the attacks deserves to be remembered, and the procedure should be tried in cases in which bromides are not well borne. Finally, we would call attention to the anæsthesia and analgesia which can easily be produced by suggestion, and which in surgery, as well as in obstetrics, may be very useful. I was present at Forel's clinic at the extraction of two obstinate teeth, which, after the proper hypnotization, were taken out without the slightest sign of pain on the part of the patient. Possibly the pains during labor may be removed by hypnotism. The anæsthesia of the mucous membrane of the fauces may be very valuable in making laryngoscopic examinations and the like.

## LITERATURE.

## 1. Hypnotism—Treatment by Suggestion (from the Year 1887).

## a. General.

- All the older references have been collected by Möbius (cf. Schmidt's Jahrbücher, 1881, Bd. 193, p. 73).
- Bérillon. La suggestion et ses applications à la pédagogie. *Gaz. des hôp.*, 1887, 123.
- Binswanger. *Deutsche med. Wochenschr.*, 1887, xiii, 42. (Present State of Hypnotism.)
- Fontan et Ségard. *Eléments de médecine suggestive*. Paris, O. Doin, 1887.
- Bernheim. *De la suggestion et de ses applications à la thérapeutique*. Paris, 1888, deuxième édition.
- Baierlacher. *Münch. med. Wochenschr.*, 1888, xxxv, 30.
- Krafft-Ebing. *Eine experimentelle Studie auf dem Gebiete des Hypnotismus*. Stuttgart, 1888.—English translation by Charles G. Chaddock. G. P. Putnam's Sons. The Knickerbocker Press, 1889.
- Maack. *Zur Einführung in das Studium des Hypnotismus und thierischen Magnetismus*. Berlin und Neuwied, 1888.
- Schrenck-Notzing, v. *Ein Beitrag zur therapeutischen Verwerthung des Hypnotismus*. Leipzig, Vogel, 1888.
- Seeligmüller. *Der moderne Hypnotismus*. *Deutsche med. Wochenschr.*, 1888, xiv, 31–34.
- Sallis. *Ueber hypnot. Suggestionen, deren Wesen, klinische und strafrechtliche Bedeutung*. Neuwied, 1888.
- Corey. *Boston Med. and Surg. Journ.*, November 20, 1888, lxix. (Therapeutic Value of Hypnotism.)
- Forel. *Schweiz. Corresp.-Bl.*, 1888, xviii, 23. (The Value of Hypnotism for the General Practitioner.)
- Herter. *Boston Med. and Surg. Journ.*, November 20, 1888, cxix.
- Mason. *Ibid.*, November, 1888.
- Bernheim. *Hypnose durch Suggestion*. *Wien. med. Presse*, 1888, xxviii, 26.
- Jendrassik. *Neurol. Centralbl.*, 1888, 10, 11.
- Meynert. *Ueber Hypnotismus*. *Wien. med. Presse*, 1888, xxix, 24.
- Weiss, D. *Prager med. Wochenschr.*, 1888, xiii, 20, 21.
- Freud. *Wiener med. Blätter*, 1888, xi, 38, 39.
- v. Krafft-Ebing. *Ueber Hypnotismus*. *Deutsche Med.-Ztg.*, 1888, 16, p. 196.
- Dessoir. *Bibliographie des modernen Hypnotismus*. Berlin, 1888.
- Liébeault. *Du sommeil provoqué*. Deuxième édition, Paris, 1889.
- Liégeois. *De la suggestion et du somnambulisme dans leurs rapports avec la jurisprudence et la médecine légale*. Paris, Doin, 1889.
- Baierlacher. *Die Suggestiv therapie und ihre Technik*. Stuttgart, 1889.
- Beaunis. *Le somnambulisme provoqué. Etudes physiologiques et psychologiques*. 12e, Paris, 1886.
- Binswanger. *Therap. Monatsh.*, 1889, 1–4.
- Gilles de la Tourette. *Der Hypnotismus vom Standpunkte der gerichtl. Medicin*. Author. German translation, Hamburg, 1889.

- Moll. Der Hypnotismus. 2. Auflage, Berlin, 1890.  
 Pitres. De la mémoire dans l'Hypnotisme. Gaz. méd. de Paris, 1890, No. 47.  
 Forel. Der Hypnotismus, seine psycho-physiol. u. s. w. Bedeutung und seine Handhabung, 2. Aufl., Stuttgart, 1891.  
 Wetterstrand. Der Hypnotismus und seine Anwendung in der praktischen Medicin, Wien und Leipzig, 1891.  
 Moll. Der Rapport in der Hypnose. Untersuchungen über den thierischen Magnetismus. Leipzig, 1892.  
 Liébeault. Der künstliche Schaf und die ihm ähnlichen Zustände. German translation by Dornblüth. Leipzig und Wien, Deuticke, 1892.  
 Binswanger. Ueber die Erfolge der Suggestivtherapie. Wiesbaden, 1892.  
 Grossman. Zeitschrift für Hypnotismus, Suggestionstherapie, u. s. w., 1893, iii, Jahrg., Berlin, Herm. Brieger.  
 Hirsch. Suggestion und Hypnose. Kurzes Lehrbuch für Aerzte, Leipzig, Abel, 1893.  
 Hecker. Ueber Autosuggestionen während des hypnotischen Schlafes. Zeitschr. f. Hypnot., ii, 1, 17.  
 Kühner. Psychotherapie. Der prakt. Arzt., 1893, 5.  
 v. Corval. Suggestionstherapie, Psychotherapie. Eulenburg's Real-Encyclopädie, 2. Aufl.  
 Benedict. Hypnotismus und Suggestion, Eine klinisch-psychologische Studie. Leipzig und Wien, 1894.  
 Grossmann. Die Bedeutung der hypnotischen Suggestion als Heilmittel. Gutachten und Heilberichte der hervorragendsten wissenschaftlichen Vertreter des Hypnotismus der Gegenwart, Deutsche Ausgabe, Berlin, 1894.

*b. Special (Various Cases cured or treated by Hypnotic Suggestion).*

- Sollier. Progrès méd., 1887, 42. (Hystero-epileptic Attacks said to have been cured.)  
 Mialet. Gaz. des hôp., 1887, 116. (Hyperemesis Gravidarum cured.)  
 Birdsall. Boston Med. and Surg. Journ., November 20, 1888, cxix. (Tremor.)  
 Frey. Wien. med. Presse, cxix, 50, 51. (Neuralgia of the Fifth cured.)  
 Frey. Ibid., xxix, 25. (Sleeplessness cured.)  
 Baierlacher. Münchener med. Wochenschr., 1888, xxxv, 39. (Report of Cases.)  
 Häckel. Die Rolle der Suggestion bei gewissen Erscheinungen der Hysterie und des Hypnotismus. Jena, 1888.  
 Forel. Schweiz. Correspond.-Bl., 1888, xviii, 6.  
 Nonne. Neurol. Centralbl., 1888, vii, 7, 8.  
 Ribot. Revue méd. de la Suisse rom., Mars, 1888, viii, 3. (Hysterical Hemiplegia cured.)  
 Scheinmann. Deutsche med. Wochenschr., 1889, 21. (Hysterical Aphonia cured.)  
 Michael. Deutsche Med.-Ztg., 1889, 63. (Epilepsy Temporarily improved. Hystero-epilepsy and Hysterical Aphonia cured.)  
 Barth. Suggestion bei Ohrenleiden. Zeitschr. f. Ohrenhk., 1889, xix, 3, p. 231.  
 Ladame. Internat. klin. Rundschau, 1890, 21, 22. (Craving for Alcohol cured.)

- v. Schrenck-Notzing. Die Suggestionstherapie bei krankhaften Erscheinungen des Geschlechtssinns. Stuttgart, 1892.  
 Donath. Deutsche Zeitschr. f. Nervenhk., 1892, 2 und 3.  
 Stembo. Die therapeutische Anwendung der prähypnotischen Suggestion. Petersburger med. Wochenschr., 1892, 37.  
 Hitzig. Schlafattacken und hypnot. Suggestion. Berliner klin. Wochenschr., 1892, 38.  
 Grossmann. Die Erfolge der Suggestionstherapie bei Influenza. Berlin, Brieger, 1892.  
 Schaffer. Netzhautreflexe während der Hypnose. Neurol. Centralbl., 1893, xii, 23, 24.  
 Tatzel. Drei Fälle von nicht hysterischen Lähmungen und deren Heilung mittelst Suggestion. Zeitschr. f. Hypnot., 1893, ii, 1.  
 Forel. Die Heilung der Stuhlverstopfung durch Suggestion. Eine praktische und theoretische Studie. Berlin, 1894.