

solution, and to it the dye was added in varying proportions, the resulting coloured fluid being then used for diluting the blood prior to its examination in the cell of the hæmocyto-meter. Further experiments, however, appeared to show that Gowers' solution might be with advantage replaced by a much less concentrated solution of sodium chloride, the fluid I now use being made up as follows:—Saturated alcoholic solution of methyl violet, 1 c.c.; normal saline solution (NaCl .75 per cent.), 100 c.c. This forms a stock solution, one part of which, when required for use, is to be diluted with ten parts of normal saline solution, thus giving a solution of methyl violet of the strength of one part in a thousand. This should be most carefully filtered before use to get rid of any solid particles, and then forms a pale violet-coloured solution, which, when seen in a three-quarter inch test-tube, readily allows the passage of light through it. This fluid is used in a precisely similar manner to those usually recommended, the blood being mixed with it in the small glass pot supplied with the instrument (supposing it to be Gowers' pattern), and a drop of the mixture placed in the centre of the cell. It is then covered, and the springs fixed in place, after which it must be set aside for a few minutes (two or three being usually sufficient), when the corpuscles will be found to have settled on the floor of the cell. The white corpuscles can now be distinguished from the red with the greatest ease, as they will be found to have taken on the stain, which is not the case with the red. At the same time the fluid is of such a degree of dilution that the field of the microscope is not perceptibly tinted.

The various solutions generally employed for the dilution of the blood—such as Gowers', Potain's, and Keyes', of which the first two contain a considerable quantity of sodium sulphate—have apparently been devised with the idea of obtaining a fluid as nearly as possible of the same specific gravity as the plasma; but this advantage, which, I believe, is apparent rather than real, is more than counterbalanced by the fact that the large amount of salts present must cause an alteration in the appearance of the corpuscles. On the other hand, the solution I propose does not appear to cause any such alteration, the small percentage of the aniline dye being quite inoperative in this respect, while the corpuscles sink in it all the more readily from its low specific gravity. The staining of the corpuscles is also of great advantage, particularly when examining blood from a case of leucocythæmia, for instance, in which it is desirable to determine from time to time as accurately as possible the absolute number of white corpuscles present and their relative proportion to the red. Indeed, I feel sure that after a fair trial it will be generally allowed that the use of the coloured saline solution reduces the labour of an observation by at least one half, at the same time that it renders the results much more reliable.

It not unfrequently happens that it is by no means easy to make out the squares on the floor of the cell, and it has been proposed to rub in the scrapings of a soft lead pencil so as to show them up better. If this be done, one is very liable to find large particles lying on the squares, which are not easily got rid of without at the same time removing the finer particles from the lines, so that it would be much better to use some substance which is always at hand in the laboratory, and which is already in the form of an impalpable powder. One of my assistants, Mr. Hallam, suggested the use of carmine for this purpose, and we found on trial of it that it answered the purpose admirably. A few grains should be placed on the floor of the cell, and then gently rubbed in with the end of the finger, when on examination with the microscope the squares will be seen to show up most beautifully, and if at the same time the solution proposed above be used the enumeration of the corpuscles becomes simplicity itself.

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## HYPNOTISM IN THERAPEUTICS WITHOUT SUGGESTION.

By DR. H. C. WOOD.

DURING a recent visit to Paris I spent some little time studying the results obtained, both in the clinic of Dr. Luys and in the private practice of certain physicians who had much faith in hypnotism, and became convinced that valuable therapeutical results were reached. It seemed to me, however, that all the physicians were approaching the practice with their minds completely controlled by the theory that the cause of the cure was the suggestion. Precisely as Dr. Tuckey entitles his recent work on psycho-therapeutics "The Treatment by Sleep and Suggestion," so do the observers whom I saw all believe that the suggestion produces the relief.

The accepted theory may be stated in a few words as follows:—That suggestions made during the hypnotic state are capable, not only of affecting the actions of the individual during the hypnotism, but also of affecting the functions of organic life so as to alter a diseased process without the patient being conscious that any suggestion has been made.

My attention was at once arrested by the absence of control experiments, and upon my return to Philadelphia I determined to try the therapeutic effect of hypnosis without suggestion. My observations further led me to the conclusion that the good results achieved were usually in hysterical cases. I had the pleasure of examining the man who was shown to the Paris Academy of Medicine by Professor Luys as a case of paralysis agitans. There can be no doubt that the man was cured of violent tremors, simulating paralysis agitans. The whole history of the case and the appearance of the man lend, however, great probability to the view that the tremors were not those of paralysis agitans, but a hysterical mockery of that disease. I found in my wards of the University Hospital two cases, one closely simulating the tremors case of Professor Luys, the other a sufferer from paraplegia, which I thought suitable subjects for hypnotic therapeutics. The history of the tremors case was that some years previously the woman had been attacked by tremors like those now present, but had recovered after three years' illness; that about three months before entering the ward of the hospital the tremors had returned. They had stopped at one time for two weeks, but at my taking charge of the case were continuous in one arm, and exactly simulated those of true paralysis agitans. I found this woman to be a good subject for hypnosis, and was especially interested to notice that the tremors continued during the hypnotic sleep. No hypnotic suggestions whatever were made to her, but the second treatment was followed by great lessening of the tremors, and four treatments sufficed for a cure. In the second case the paralysis of the legs was almost complete, associated with irregular patches of anaesthesia on the legs, absolute loss of the patellar reflexes, and great complaint of weakness and numbness in the arms. The woman had not the appearance of being hysterical, but the diagnosis of hysterical paraplegia had been made by my assistant, Dr. Dercum, who had charge of the wards during my absence. The ordinary treatment had been instituted without avail. During the hypnotic treatment no suggestions were made to the patient. After the second *séance* the numbness disappeared from the arms; after the third the woman was able to stand; after the fifth she could walk. After eight treatments she was able to walk long distances, stand very well on one leg, and was about to go from the hospital as cured, although her knee-jerks had not returned. I do not propose to commit myself to any theory as to the method in which hypnosis produces cure, although as yet I do not see why all the effects obtained cannot be accounted for by the theory of mental influence. For the exertion of such influence it is not essential that the physician should speak to the patient specifically about his or her case; especially is this true at the Paris and Nancy clinics, since the whole atmosphere is heavy with faith. The patients come to be cured of their diseases; they undergo a process which to the ignorant is most mysterious, and which even educated people must, until they are accustomed to it, look upon as "uncanny." The elements of profound mental impression are all present, and it needs no words of the physician to bring them into action.

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BRISTOL DISPENSARY.—The report to be submitted to the annual meeting of the Bristol Dispensary managers will show that it has been carried on very efficiently, and that the number of patients has increased since 1888 by 752. Subscriptions by *employés* of large firms have also increased, the private subscriptions remaining at the same level as in previous years. The committee also report with pleasure a donation of £20 from Mrs. Goss in aid of patients sent to convalescent homes. The legacy of the late Mr. William Thompson has now been handed over to the treasurer, in securities and cash, for investment.