a longer isolation and more careful observation of those patients who have had the disease, while the best results in the matter of treatment of acute cases are to be obtained from the exhibition of salines in frequently repeated doses sufficient to produce purgation, continued without a break so long as active signs of the disease persist, and followed, if necessary, by a few doses of an astringent mixture. The sera and vaccines of the present time are uncertain in their action, but we may hope for a specific cure when the infecting organisms become known more accurately and when suitable vaccines and sera can be prepared from them.

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Auto-suggestion and Delusional Insanity. By DAVID THOMSON, M.B., Ch.B.Edin., formerly Assistant Medical Officer, Horton Asylum, Epsom.

THE presence of delusions, whether arising primarily or following other mental states, is significant of a faulty cerebral action, yet the co-existence of normal ideas suggests that the morbid process is limited to certain groups of nerve-cells. It is thus reasonable to suppose that many of the nerve-cells associated with ideation are in such cases working normally. There would appear to be "wrong thought centres" or "wrong series of associations" giving rise to delusions.

Granting this assumption, what curative measures are practicable? How can we get at these morbid areas or associations?

We cannot lay hands on the cells, possibly much scattered, that are the root of the evil to destroy them. But there is another plan, and that is to train other cells to set up ideas contradictory to those emanating from the diseased cells, that is to say, we must try to produce a habit of thought exactly contradictory to the delusions, and finally, by constant repetition, cause a group of cells to produce automatically ideas dominating them. At all ages the brain seems capable of training to a marvellous extent. It would suggest that there are more nervecells than are ordinarily required. In Italy the re-education of dements is thought practicable, which means the training of nerve-cells whose energies have never been tapped.

David Ferrier, in his Lumleian Lecture on "Tabes Dorsalis," pointed out that the great improvement in the gait of tabetics by systematic exercises was evidently due to the opening of new motor pathways, but that this took considerable time and perseverance. Reasoning thus, I commenced to try to develop in several cases of delusional insanity habits of thought directly contradictory to their delusions. I tried to teach them a process of auto-suggestion. I carried out this line of treatment in four cases at Horton Asylum during a period of several months—from November, 1907, till May, 1908.

CASE 1.—H. M. H—, admitted June 10th, 1903, æt. 41, married. Not the first attack.

Synopsis of notes.—On admission patient has a silly expression. Behaves very childishly, laughing and talking constantly to himself. He states he can take his food here, but at home it tastes "queerly," and he suspects his wife puts something into it to get rid of him.

History.—Patient has been strange since Christmas last. He is constantly shouting and laughing and talking to imaginary people. He dances in the streets to the organs. He refuses food, does no work, is untidy in his person, and wanders aimlessly about.

May 25th, 1904.—He is weak-minded, irrational, imagines he is acted upon in some peculiar way, etc.

May 13th, 1907.—He is re-certified as a case of delusional insanity; irrational and introspective; declares he is dead and has been bleeding to death for the last six months.

September 10th, 1907.—He says he is dead. Writes gloomy letters to his wife. Says he has no bones, and that his muscles are torn up.

It was about this time that I got to know the patient. He was quiet, docile, not excitable, and could reason to some extent, but he had a strong delusion that his body was in a state of decline. He was miserable, and said his bones and muscles were rotting away, and stated so in his letters to his wife.

On September 20th, 1907, I started him on auto-suggestion as follows. I wrote distinctly on a sheet of paper the following sentences: "I am strong and happy"; "My body is strong and healthy"; "My bones and muscles are strong and supple"; "I have a cheerful, happy mind." I brought him into a side room, and made him repeat to me aloud these sentences. After he had repeated them ten times I put a dot on the paper (.). I kept him till ten dots were on the paper (....), showing that he had repeated the four sentences 100 times. Thus he had repeated 400 sentences, directing efforts of thought contradictory to his delusions.

By systematic accumulations of these I hoped finally to produce in his mind such a habit of these thoughts that his delusions would be finally overwhelmed.

I directed him to repeat these sentences to himself thousands of times a day, and to register the number of times he repeated them by putting a dot on the paper for every ten times. Also, to make sure that he did do something, I directed him further to write down the sentences several times on the paper.

I found the dots and the sentences on his paper at the end of each day, but whether he repeated the sentences properly to himself I cannot tell. Anyhow, I made him repeat aloud to me 400 sentences per day.

By the end of three months he had repeated to himself 150,000 sentences similar to the above, 20,000 sentences aloud before me, 520 sentences he had written out on paper; total, 170,520 single sentences.

The result of all this, as in the other cases, was very slight. Yet it seemed to me that there was some effect being produced, which ought to encourage further efforts. He assumed a more cheerful aspect, and his letters to his wife became less gloomy. When I questioned him upon his condition I had him trained to say that he was strong and happy, and that his bones and muscles were quite strong and healthy. But his delusions still remained, though not so intense.

CASE 2.—K. R—, admitted April 8th, 1902, æt. 54, painter, married; not first attack.

Synopsis of notes.—On admission he is violent. His conversation is not coherent. He refuses to answer questions. Says he is on duty. Has delusions that his arms and legs are paralysed and broken, etc.

November, 1902.—He is acutely depressed and deluded.

February, 1903.—He declares he is an animal and a dog in the sight of God, and behaves as such.

I got to know him on October 8th, 1907. His memory was good, but he was extremely depressed, and sat silent with his head hanging down all day long. He said he was suffering judgment for self-abuse, etc. He was very deluded and stated that he heard God speaking to him through the sounds of the billiard balls. He was quiet, well behaved, and not excitable in the least.

On this patient I expended an exceptional amount of energy and time, and although the results after six months were very small, yet I think they were hopeful. It required one month of stubborn perseverance on my part to get him to finally agree to carry out the instructions I gave him.

The suggestions he got were of the following type: "I refuse to have any silly ideas"; "I am going to be strong and happy"; "I have a strong and healthy mind"; "I have absolute confidence in myself." I also got him started to do some useful work in the wards.

In April, 1908, I finished my endeavours, and in my opinion he was then more cheerful and his delusions were not so intensely dominating his mind.

This was the result after he had repeated to himself 296,000 single sentences; 10,000 repeated aloud to me; 641 written. Total over 300,000 repetitions.

October, 1908.—The notes describe him as depressed and self-accusatory. Believes he is a water-rat, etc., and that he is under God's judgment. He does a little work and is clean

and tidy. Health fair. This shows, then, how helpless one feels in trying to drive away fixed delusions.

About the other two cases I will only say that I devoted much less time to them, and in them there was very little result to be observed.

Before concluding I would like to mention a rather interesting fact about a similar case.

While homeward bound from a voyage to the West Coast of Africa, a negro, about sixty years of age, came aboard at Sierra Leone and put himself under my care as ship's surgeon. He said he was going to England to get treated by the skilful physicians there. On careful inquiry I discovered that his ailments were more or less imaginary and told him so, and finally I managed to extract from him the whole history of his case. He was a man with a capable brain and had amassed a considerable fortune by his cleverness, but he had become the victim of a delusion which dominated his mind. He had been brought up in the Christian faith, but had become obsessed by the idea that the native fetish-men of Sierra Leone were acting on his brain telepathically and trying to harm him. This delusion had come suddenly eight years previously, and on careful inquiry I found that it had originated in a violent nightmare. I inquired about sun-stroke, but he declared that his work at that time was always indoors.

In the hypnotic sleep suggestions have a very powerful effect, and can produce temporary delusions. Sleep, according to hypnotists, is identical with the hypnotic sleep, except that in ordinary sleep the person is en rapport with himself. It might be possible, then, for a vivid idea to arise during sleep, as in a nightmare, which might conceivably form the commencement of a delusion. If, however, it should come to be proved practicable that new thought-habits can be engrossed upon the brain to counteract existing wrong thought-habits, then the practice would be of great use in competent hands in the mental hygiene and training of children.

In the long-fixed delusions of the insane I have shown that hundreds of thousands of suggestions have only slight effect, but they might be of value in very early cases.

I beg to thank Dr. Lord, the medical superintendent of Horton Asylum, for his kind help and interest.