

tile cholera. The *prognosis* is unfavourable, and death is almost certain in the advanced cases; and sequelæ were observed in one child three years after it was cured. In this case the child was deaf and dumb, and exhibited slight paresis of the tongue and of the left leg. The *treatment* offers no remarkable feature except in a prophylactic point of view; and as a result of the enlargement of spaces in the city, and better ventilation, the disease has diminished in frequency of late years. The tables drawn up by the author from his own experience show conclusively that the deaths from cerebro-spinal meningitis increase as the cubic space afforded to the patients in the wards diminishes, and *vice versâ*. Children at a very early age require much space and fresh air.—*Med. Times and Gaz.*, April 16, 1881.

On Hypnotic Contractures.

The strange phenomena of hypnotism are elicited with readiness in the subjects of hysteria, and have been for some time the subject of special study at the Salpêtrière by M. CHARCOT. His latest investigations (described at a recent meeting of the Société de Biologie) have been chiefly directed to the phenomena of muscular contracture, which is readily obtained by the mechanical stimulation of the tendon, of the motor nerve, or of the substance of the muscle, so that it can readily be localized in a single muscle or group of muscles. This contraction is very intense, and fixes the limb in a given attitude with a force which cannot be overcome even by energetic efforts. When the hand is closed thus it cannot be opened by any force which can be applied to it. Nevertheless, it can be at once relaxed by mechanical stimulation of the antagonists, such as is afforded by gentle rubbing of the extensors of the hand; the fingers are at once extended, and the contracture disappears as if by enchantment. If the contraction is not thus relaxed, when the patient is awaked one of three things may happen: (1) The contracture may disappear, the patient recovering with consciousness, and the liberty of all movement. (2) If the patient is rendered cataleptic the contracture may continue after the awaking, being, as it were, fixed by the catalepsy. (3) In some cases the contracture persists, although the patient is not rendered cataleptic.

The patients who preserve the contracture after the recovery of consciousness present the closest resemblance to hysterical patients affected with permanent contracture. Friction of the antagonists is powerless to resolve it. A magnet applied near the fixed limb only increases the contracture, but applied to the opposite limb it causes the curious phenomenon of the transfer of the contracture. This changes its place to the opposite side, but does not yield to the magnet. To remove it the patient must be again placed in the hypnotic state, when the stimulation of the antagonists suffices to make it disappear. In most cases the change of contracture occurs in all the muscles of a limb, but it has also been found that when only a few muscles are affected by the contracture, the transfer involves exactly the same muscles of the opposite side; and this is true however the first contracture may have been brought about. Anæmia of a limb, such as is produced by Esmarch's bandage, hinders the development of the neuromuscular hyper-excitability, as Brissaud and Richet demonstrated. If, for instance, a limb is thus treated, the patient hypnotized, and the muscles of a limb are rubbed, no contracture is induced; but as soon as the current of blood is restored, the contracture occurs, without any further stimulation. Hence it seems that in the anæmic limb there is a sort of potential contracture. The impulse is received by the nerve centres, and is preserved there until the re-establishment of the current of blood, restoring to the muscles the ability to contract, permits it to manifest itself. This latent contracture may be transferred by the

magnet from one limb to another on the opposite side, just as may be the developed contracture. As an illustration of the method of obtaining these results an instance is described in detail. The patient, having been hypnotized, is in a state of lethargy, with muscular hyper-excitability; but it would not do to apply Esmarch's bandage while she is in that condition, because the mechanical stimulation would probably cause a contracture of the whole limb. The patient's eyelids are therefore raised. She at once becomes cataleptic, the limbs retain any position in which they may be placed, but the muscles have ceased to be sensitive to mechanical excitation. Advantage is taken of this loss of excitability to apply the bandage. The eyelids are then pressed down. The catalepsy at once ceases, the patient resumes the condition of lethargy, and the muscles recover their excitability. Then, without touching the limb elsewhere, a small button is pressed several times against the ulnar nerve behind the elbow. No effect follows until the bandage is removed, and then, as blood returns to the limb, the hand slowly assumes the position due to contracture of the muscles supplied by the ulnar nerve, especially the interossei. In this experiment the excitation of the ulnar nerve has impressed the nerve centre in a peculiar way, but only in the parts corresponding to the ulnar nerve. The nerve action for the contracture in the muscles supplied by the nerve takes place in the nerve centre, but not in the periphery until the return of blood to the muscles restores their contractility. Again, the patient being asleep, the arm is anæmiated. The ulnar nerve is then stimulated, of course without effect. Nevertheless, the spinal cord has been influenced, and if the circulation were to be restored the contracture would come on. But if, instead of this, a magnet be applied to the other arm, the contracture is produced in this in exactly the same way as if it were actually transferred from the first side. The lateral contracture has been transferred. These phenomena, in the opinion of M. Charcot and M. Richet, are evidence of the reflex nature of the neuro-muscular hyper-excitability, whether produced by the mechanical stimulation of a nerve, a muscle, or a tendon.—*Lancet*, May 7, 1881.

Treatment of Diphtheria.

WEISE states (*Berl. Klin. Wochen.* No. 4), as the result of his experience of Guttman's treatment of diphtheria by pilocarpin, that it produces an excellent and rapid effect in many cases. His own treatment, under which he has had fifty-four cases without a death, is with salicylic acid and benzoate of soda. Every hour and a half the patient inhales, or has his throat painted with, a solution of salicylic acid (one part, by weight, to fifty of glycerine and rectified spirit in equal parts), and at the same time takes benzoate of soda internally, and stimulants. The inhalation is given with an instrument constructed by Dr. Weise, consisting of a small spray-apparatus combined with a tongue depressor.—*London Med. Record*, April 15, 1881.

Treatment of Pharyngeal Diphtheria.

Dr. OERTEL directs his treatment (*Archives of Laryngol.*, Jan. 1, 1881), first, to the destruction of the cause of the disease; and second, to the removal of the products from the affected parts. For the former, he thinks carbolic acid a most efficient remedy. When the results obtained from its use have been unsatisfactory, the solution has not been sufficiently strong. Of twenty-seven of the graver cases which have been treated by Dr. Oertel, he believes that three-fourths would have ended fatally but for the use of carbolic acid. He employs a five per cent. solution nebulized by means of a steam-atomizer, and avoids the use of a brush or sponge, as he thinks these only irritate the parts. He considers the absorption of the carbolic acid