aché in the mornings. He fainted the day after discharge and was readmitted with no abnormal signs but symptoms of headache and depression. After a period of three weeks' convalescence he seemed to be well again.

Treatment

It was only natural to give sulphapyridine to cases showing meningeal symptoms. If the cerebrospinal fluid is not clear there can be little justification for withholding a drug which may be life-saving. Only the first three cases in which the fluid was not clear received the drug, 9, 8, and 6 grammes being given in the twenty-four hours. Vomiting, headache, and depression were made worse and recovery was delayed. Certainly those patients not receiving sulphapyridine recovered more quickly. Eventually treatment was mainly symptomatic—*aspirin* and *phenacetin*, with copious glucose and fruit drinks. A wash-out of the stomach on the third day with bicarbonate and an enema seemed to give much relief.

Comments

Mumps is a virus infection probably spreading via the blood stream and therefore able to affect any part of the body, with a predilection for the parotid gland. In the epidemic described the number of cases of mumps with complications was high. The percentage of all cases of patients developing meningeal symptoms in the epidemic was difficult to judge, but of those admitted to hospital 30% had signs and symptoms of meningeal involvement. It is possible that the particular virus was of a neurotrophic type. The meningeal symptoms have been described as due to the parotid gland compressing the internal jugular vein. This can be discounted because not all cases have a parotitis. In the cases described no polymorphonuclear leucocytes were seen in the cerebrospinal fluid; it is therefore to be expected that sulphonamides will not alter the course of the disease. A guinea-pig received some of the cerebrospinal fluid from Case 5 intracerebrally: no rise of temperature and no apparent ill effects ensued.

REFERENCES

- Birnberg, T. L. (1939). *Minnesota Med.*, **22**, 173.
Gordon, M. H. (1913). *Lancet*, **2**, 275.
Silwer, H. (1936). *Acta med. scand.*, **88**, 355.

TREATMENT OF IMPOTENCE: A COITUS-TRAINING APPARATUS

BY

J. LOEWENSTEIN, M.D.

For the purpose of this paper I understand by impotence solely the impotentia coeundi caused by disorders of erection, accompanied, nevertheless, by normal ejaculation and normal orgasm. This is the most common form of impotence. The greater number of these cases are psychologically determined. The much rarer cases of organic impotence are not taken into consideration here, although they, too, are sometimes partially determined or accompanied by psychological factors. The treatment of psychological impotence is of course mainly a psychological one. It is carried out by the usual methods of persuasion, suggestion, and analytical treatment. Sometimes physical, medicinal, or hormone therapy is applied in addition, but all these methods are efficacious mainly through influence on the mind. In the same way, treatment by a training apparatus (according to Dr. Spiegel) which will be discussed below displays its therapeutic efficiency only through its effect on the mind and will.

This apparatus aims at supporting the insufficiently erected penis at its immissio. Accordingly, it is only a mechanical expedient without any therapeutic value of its

own. It gains this value only when its application is organically fitted into the framework of an individual psychological treatment.

Psychological Impotence

Psychological impotence consists essentially in inhibitions which hamper the normal process of erection in the spinal cord so that the erection necessary for the immissio fails to occur. These inhibitions mostly consist either of conscious ideas or of unconscious and suppressed complexes and conflicts, the nature of which is disclosed by analytical treatment. But common to all cases are the fear of the failure of erection and the associated idea: "I am impotent." The erection is essentially a psychological process, and no other process is so liable to be disturbed by inhibiting ideas as that of erection, particularly in neurotic individuals. The bare idea of failure and the ensuing self-observation may be of such a strong inhibiting nature that erection fails to occur. Each new fiasco will enhance the autosuggestion: "I am impotent." In mild fresh cases without parathic superstructure this inhibiting autosuggestion may be overcome by a reassuring explanation alone. In more serious and inveterate cases the impairing basic complexes and conflicts have to be made conscious and resolved by analytical work. If this is attained to a sufficient degree, not only are the original inhibitions removed but, as a rule, also the idea of insufficiency, together with their autosuggestive consequences, so that normal erection will take place.

Sometimes, however, there happen to be cases which take quite a different course. In spite of good results of the analytical treatment, the patient fails again in an attempt to cohabit, because the habitual self-observation and mental tension hinder erection. Such renewed failure will, of course, further enhance the autosuggestion of incurable impotence and will not only nullify the past psychotherapeutic treatment but even endanger any future attempt. There will scarcely be a psychotherapist who has not experienced such disappointments while treating cases of impotence.

The Apparatus in Use

In order to overcome this embarrassment a coitus-training apparatus has proved to be very efficacious. It consists of twin splints made of thin wire which support the underside of the membrum, ending at each end in a ring. The ring at the pubal end rests upon the symphysis, while the opposite one grips the sulcus glandis, so that the glans remains beyond. In order to adjust it there are hinges at the upper side of the rings. The apparatus is to be fixed to the flaccid penis, and this takes no more time and trouble than, for example, putting on a condom. The two splints are held together at the pubal end by a small rubber ring, which makes it possible for the apparatus to adapt itself to all changes in the circumference of the penis. It is extremely light and easy to handle, and it does not hurt or irritate the male or female partner. Besides, it is so inconspicuous that the female partner does not necessarily notice it. The photograph, reproduced half-size, demonstrates this apparatus.

When the psychological treatment of a case is drawing to its close and the psychotherapist has gained the impression that the erection proper will function but, on the other hand, is afraid of interference caused by auto-suggestive influences, the patient is handed the apparatus with the necessary instructions. The conviction is imparted to him that with the help of the apparatus he will be able at any time, regardless of erection, to accomplish a coitus, and that a failure is excluded. It is very likely that the patient will soon report a perfect success. Either the erection of the supported penis was in itself vigorous enough, so that the patient was able to accomplish the

cohabitation unperturbed by the apparatus, or the erection was imperfect, which, however, did not prevent insertion of the flaccid membrum into the vagina and accomplishing the cohabitation. In either case the patient is to be advised to use the apparatus for some time, in order to give him a sense of absolute security and to prevent a recurrence.

After a training of several weeks the patient's self-confidence will become so strong that he can dispense with the apparatus for good. (For want of space it is not possible to report case histories. Yet it may be mentioned that this paper is based upon the results of 36 cases.)

It is necessary to stress the point that the patient must not receive the apparatus before the psychological treatment is finished. Application of the apparatus at any earlier stage would not only impair the effect but endanger recovery, because the unsolved complexes would still retain their hampering influence on the reflexes. It stands to reason that the apparatus cannot replace psychological treatment, and if prescribed indiscriminately it will often be a failure and the last stage of the patient be worse than the first.

A further indication for applying the apparatus may be given by certain cases of homosexuality. One of the dominant features of this disorder is sometimes a fear of being impotent with women. In such cases it is not too difficult to resolve the unconscious complexes and inhibitions and so prepare the soil for heterosexual activity. Yet again the check to erection through the habitual counter-suggestions constitutes an obstacle that may be overcome by the training apparatus.

A final remark may be offered about the impotence of the elderly male. Potency does not usually disappear at once, but gradually. There is a long period of decreasing and changing potency. It is obvious that during this period many opportunities arise for the development of psychological inhibitions. Therefore it is always necessary to inquire for psychological causes when an elderly man complains about a considerable decrease of his potency. Naturally, the first surprising failures, which sooner or later are bound to occur, will lead to the horrifying idea: "Now my potency is gone for good and all." This idea will not easily leave the despairing or resigned man. I need not repeat the further psychological reactions which ensue and render the whole situation more and more hopeless. It is not right—as is often done—to provide the patient with a few consoling phrases about the laws of Nature and then leave him to his own devices. For these are the very cases in which psychological treatment and the prescription of the training apparatus are indicated, sometimes preventing tragic complications.

Of course, failures may occur. Their cause is not always a badly fitting apparatus or awkwardness on the part of the patient. Sometimes, in spite of the apparatus, erections do not reappear. These are the cases in which the most thorough and painstaking analysis fails because

an original inferiority of the sexual organs meets the hampering psychological influences. If this inferiority of the sexual organs is diagnosed previously, the application of the training apparatus is contraindicated as well as treatment of the impotence by any other means.

Summary

In the last phase of the treatment of impotence full success may sometimes fail to appear because the patient's habitual self-observation and counter-suggestion impair erection. In such cases the described coitus-training apparatus is to be recommended in order to complete the psychological treatment. Its application is indicated only within the framework and at the end of a psychotherapeutic cure.

Medical Memoranda

Tetanus Treated with A.T.S., Avertin, and a High-calorie Diet

The following case seems to be interesting enough to merit publication.

CASE REPORT

A male farm hand aged 22 was admitted to the Hospital of St. Cross, Rugby, on October 5, 1940, suffering from well-developed tetanus. There was a history that six days previously, while returning from church on Sunday morning, he had felt very cold and "could not walk home quick enough to get warm."

The following day his jaws were stiff and he felt "sore in the back." No notice was paid to the symptoms, and he continued at work. On Tuesday his back was more troublesome and his jaws ached, but milking and other duties on the farm were fulfilled as usual. On Wednesday he was persuaded to remain in bed until after the midday meal. He now complained of much stiffness in the back, but in the evening it was still possible for him to stoop down to lace up his boots. Less discomfort was experienced when he was active; consequently he walked about the kitchen to obtain relief. On Thursday there was no improvement, but medical attention was not considered necessary until the following day. Even then the patient described his condition as "not very bad"; he could eat his food and smoke cigarettes, and at night slept well. On Saturday his medical adviser examined him again and made inquiries concerning recent injuries. The patient then recalled stabbing his left small toe with the prong of a fork fourteen days previously. The accident had occurred as he was cleaning up the rick yard. At the time of the injury the boot had been removed, but only a trifling scratch was visible; the wound was thus ignored and forgotten.

On admission to hospital a slight superficial injury to the left small toe was found; risus sardonicus was noticeable; the masseters were contracted, the forehead wrinkled, and the abdominal wall rigid. Sweating was profuse and breathing difficult, and spasms shook the patient, arching the back. The tongue was also bitten. He was put into a small darkened ward by himself. Morphine sulphate grain 1/4 was injected hypodermically and 3,000 units of A.T.S. was given intradermally and intramuscularly. There was no skin reaction, so 160,000 units of A.T.S. was administered intravenously, followed by a full anaesthetic dose of avertin per rectum.

Six hours later 40,000 units of A.T.S. was given intravenously. The following day more avertin was given at 7 a.m. and 5 p.m. The masseters were slightly relaxed and sweating was decreased. The tongue was sore, pain in the back was severe, and muscular contractions were distressing. Fluids were taken hourly.

The following day brought no change: the patient was continually moaning with the pain caused by the contractions, and he was extremely anxious concerning his condition. During the night 4 drachms of paraldehyde with 6 oz. of water had been given to promote sleep, but a full anaesthetic dose of avertin was necessary early the following morning. All through the day spasms occurred irregularly and the patient was extremely restless, attempting to roll out of bed.