THE SERUM TREATMENT OF SYPHILIS.

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As this method of treatment is at present only entering upon its trial in this country, the following notes may be of interest:

The patient, a middle-aged gentleman, was first seen on November 30th, 1895. He was then suffering from a chancre on the dorsum of the penis, over the corona, about the size of a threepenny piece. There was little doubt that it was a hard sore. Liquor hydrargyri bichloridi was at once prescribed. This was, however, taken with difficulty, as it produced sickness, and was soon replaced by hydrargyrum c. creta.

On December 18th a marked secondary roseolous rash had appeared, accompanied by sore throat and pains in the bones.

On December 22nd the chancre had spread rapidly, and was taking on a phagedænic character. The following day a large dirty-yellow slough was snipped away with scissors and nitric acid applied over the whole of the raw surface. Despite this and the continuance of mercury, together with tonics, the ulcer continued to enlarge, new sloughs forming until, on December 31st, it extended half way round the penis and penetrated at least two-thirds of the way through the organ. Lotio nigra, followed by iodoform, had been the local treatment.

On this date, the facts having previously been explained to the patient and he being in imminent danger of losing his glans, all medicines were stopped, and the injection of anti-syphilitic serum, obtained from Messrs. Burroughs, Wellcome, and Co., was begun.

On December 31st, 1 c.cm. was injected into the left flank. There was no apparent effect. The evening temperature was normal.

On January 1st, 1896, 2 c.cm. were injected into the right flank. The evening temperature was 99.2°. The patient felt sick about two hours after the injection, but this passed off in an hour. There was distinct redness and increased swelling round the chancre.

On January 2nd, 3 c.cm. were injected in the left flank. No further change was noted. The temperature was normal.

On January 3rd, 4 c.cm. were injected in the right flank. The chancre had certainly not spread since December 31st. The edges were now clear of slough. The patient said he felt "all right." The evening temperature was 98.8°.

On January 4th, the slough was separating, and the secondary eruption was almost gone.

On January 6th, the slough had all come away, leaving a healthy granulating surface. The patient's general condition was improving.

On January 25th, the patient had been out for nearly a fortnight, and had put on almost a stone in weight. The wound was practically healed, chiefly by third intention.

The whole dose of 10 c.cm. was spread only over four days, instead of seven as is usual, but the urgency of the symptoms seemed to warrant this. So far as can be judged from one case, the serum seems to have had a very good effect. It remains to be seen if the experience of others will confirm this opinion.

AFTER-HISTORY OF THE FIRST CASE OF MYXŒDEMA CURED BY THYROID EXTRACT.¹

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THE theory and practice of the treatment of myxœdema by thyroid extract are now well known, and as I have given a full account of the subject in an article,² which

is now in the press, there is no necessity for any preliminary remarks; and we may at once proceed to the consideration of the two main points with which I wish to deal in this short paper. When thyroid extract was first suggested by me³ as a remedy for myxœdema early in 1891, and when, a few months later, I⁴ was able to bring forward facts proving the efficiency of this remedy, two important questions were raised: (1) Can myxœdema be completely cured? (2) Will not the disease ultimately return, even if the use of the remedy is continued?

In answer to these, evidence will be brought forward to show that myxœdema can be cured, and that it does not return when the use of the remedy is continued. It is necessary, however, to be quite clear as to terms. Myxœdema is a symptom or combination of symptoms of loss of the function of the thyroid gland. In the idiopathic form it is a symptom of chronic interstitial thyroiditis, just as anasarca may be a symptom of renal disease or ascites of hepatic disease. Thus the myxœdema can be cured, although the chronic interstitial thyroiditis still remains. As myxœdema is thus a symptom of thyroid inadequacy, it not only occurs as a result of removal or of fibrosis of the thyroid gland, but also in rare cases in consequence of other diseased conditions of the gland.

In illustration of this two interesting cases which have been observed by Köhler may be mentioned. In one⁵ the myxœdema developed in consequence of syphilitic disease of the thyroid gland, and as this improved under treatment by potassium iodide the myxœdema disappeared. In the other⁶ the myxœdema occurred as a result of actinomycosis which affected part of the thyroid gland. Great improvement in the myxœdema followed the removal of the infected tissues by surgical measures.

In myxœdema which accompanies fibrosis of the thyroid gland, we cannot restore the gland to its normal condition, but we can restore the patient to health if no incurable complication has arisen. For example, a gentleman,⁷ aged 44, who had suffered from myxœdema for about two years and a-half, was sent to me three years ago. At that time he suffered from well-marked myxœdema. He could scarcely walk half a mile, and could undertake no work. Under treatment by thyroid extract, rapid improvement took place, so that in six weeks the myxœdema had almost entirely disappeared. Five months later he wrote to say that he was "quite cured." So complete has been the recovery of his mental and bodily capabilities, that a year and a half ago he was able to undertake the duties of secretary to a large manufacturing company, and not long afterwards he was able to ascend a mountain over 3,000 feet high with a walk of ten miles without feeling much fatigue. A daily dose of 10 minims of thyroid extract is sufficient to keep him in good health.

In order to show that patients remain free from myxœdema as long as they take thyroid extract and without any increase in the dose, a short reference must be made to the first case in which the treatment was adopted. This patient was a woman, aged 46, who had suffered from myxœdema for four or five years. There was well-marked swelling of the face, hands, and feet; dry skin, without perspiration; loss of hair, subnormal temperature, langour, slowness of speech and action. It is now four years and a-quarter since the treatment was first commenced in April, 1891. She gradually lost all the symptoms of myxœdema, which, however, partly returned on two occasions when the use of the remedy was discontinued for a time. She has for long been free from myxœdema, and is so now. The swelling has gone, and the skin is soft and moist; the hair has grown again, the temperature is normal, and she leads an active life as the wife of a working man. She continues to take one drachm of thyroid extract during each week. As this case remains well at the end of more than four years, it is evident that as long as she continues to take the extract she will not have myxœdema, even if she lives for another twenty years. This continuance of good health in the adult gives us all the more reason to expect that cretins, if treated early and continuously, will

³ *Transactions of the Northumberland and Durham Medical Society*, February 1891, p. 92.

⁴ *BRITISH MEDICAL JOURNAL*, October 10th, 1891, p. 798.

⁵ *Berliner klinische Wochenschrift*, July 25th, 1892, p. 743.

⁶ *Ibid.*, October 8th, 1894, p. 927.

⁷ *Lancet*, May 13th, 1893.

¹ Read in the Section of Medicine at the Annual Meeting of the British Medical Association held in London, July-August, 1895.

² *Diseases of the Thyroid Gland*, *Twentieth Century Practice of Medicine*, vol. iv (New York).

also grow up and develop into normal adults. It will, of course, take years to prove this, but I have brought forward these observations, as they help to show that in cretinism it is well worth while to persevere with the treatment year by year with this object in view.

MEMORANDA: MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

A CASE OF PHOSPHATURIA, OR THE PHOSPHATIC DIABETES OF TESSIER.

S. W., a clerk, came to me on July 10th, 1894, complaining of painful micturition, with a feeling of irritation in the urethra for an hour or even two hours afterwards. He had severe lumbar pains extending down the thighs, and always felt languid and depressed, especially in the morning. He had lost flesh the last few months, and attributed this to a severe fall from his bicycle some months before, when he hurt his spine. His bowels were obstinately confined to such a degree that he had been in the constant habit of using enemata and aperients. The tongue was much furred; he complained of pain after food; his appetite was voracious. On examination of the urine, I found it alkaline, frothy, sp. gr. 1027; the total quantity passed in twenty-four hours was 80 ounces. On boiling, a dense white cloudy precipitate was formed, which cleared up immediately, with effervescence directly an acid was added. I ordered dilute hydrochloric acid $\text{m}\times$, tr. nucis vom. $\text{m}\times$, with infusion of gentian twice daily. A warm bath was given, followed by a cold needle douche. Alcohol in all forms and coffee were forbidden, and he was recommended to take light nutritious food—meat once a day; plenty of milk but no potatoes, peas, turnips, carrots, etc.; no pastry. Toast was to be taken instead of bread.

On August 1st, the patient came again, looking much better. He said the bowels acted every day, and the aching pain had left him, which he attributed to the baths. The urine was faintly acid; sp. gr. 1020; micturition was less frequent, and there was very little pain afterwards. As he felt the loss of stimulants, a little weak whisky and water was allowed at dinner. He was ordered to take one teaspoonful of Fellows's syrup of hypophosphites three times a day with food, and one teaspoonful of Scott's emulsion of cod-liver oil.

On August 17th, the patient was much better, and said he had gained in weight since I saw him. The urine was acid, sp. gr. 1020, no irritation; bowels still regular; sleeps well, and appetite not so voracious, although he enjoys his food. I sent him to the Isle of Wight for a fortnight's change, enjoining him still to continue with Scott's emulsion.

On September 1st, he said he felt better than he had done for several years. The urine was quite normal.

Between September 1st and December, I saw him several times. He has had no return of bad symptoms, and assures me he is quite well.

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THE VALUE OF HYPODERMIC INJECTIONS OF COCAINE IN THE VARIOUS NEURALGIAS.

I AM prompted to write briefly on the above subject in the hope that I may elicit the views of others who have tried cocaine in the same way and for the same purposes. So little appears to have been written on this subject that I am tempted to believe cocaine has not been used in the manner indicated so extensively as my own experience prompts me to believe it deserves.

For the last four years I have been in the habit of using hypodermic injections of cocaine in lumbago, sciatica, pleurodynias, all forms of muscular rheumatism, and also for neuralgia of the head and face. For all, excepting neuralgia of the head and face, I inject from $\frac{1}{4}$ to $\frac{1}{2}$ a grain over the seat of pain; for the latter I inject into the arm. In a very large percentage of cases the result is most striking; the pain disappears almost entirely for some hours, to return in a very much milder form. I continue the injections as long as the pain lasts. I claim for this method of treatment not only

marked alleviation of pain during the period of the attack, but also a distinct shortening of its duration.

That the results obtained are due to the local anæsthetic effects of cocaine there can be little doubt, and such being the case objection may be taken to the treatment on the grounds of its being directed to symptoms alone. Against such objections I would argue that the treatment may be carried out in conjunction with any other measures suitable to the case. That pain, with its lowering effects on the system, begets pain is an admitted fact; the relief of pain must therefore be a powerful adjunct to any treatment which has for its object the removal of the cause.

The markedly good results obtained by injecting cocaine into the arm for neuralgia of the head and face, cannot, however, be explained on the grounds of its local anæsthetic effect, and must probably be due to vasomotor influence. That it does act like a charm in many such cases in which all other drugs, morphine included, have failed, my own personal experiences enable me to affirm.

In no cases have I seen dangerous symptoms arise from the use of the drug, and in only very few have I observed slight temporary discomfort.

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JOINER'S HAND.

A MIDDLE-AGED carpenter, who was recently treated for bronchial catarrh at the City Dispensary, was the subject of a curious deformity caused by long use of the plane.

Two large bursæ had formed over the base of the proximal phalanx of the right thumb, greatly increasing the apparent width of the neighbouring joint. In addition to this the terminal phalanx of the right little finger was bent away from the other fingers by repeated catching on the bench. These deformities are, I believe, pretty common, but, being usually painless, are not often noticed in the out-patient room. Were the bursæ to be inflamed they might be mistaken for gout. There was no history of gout or rheumatism in this patient, but a little rheumatoid arthritis.

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THE DANGERS OF COCAINE.

As the subject of the dangers of cocaine has recently attracted attention I may be permitted to point out the precautions I employ in its use, especially as I have used it largely ever since it was first introduced for the production of local anæsthesia. I combine resorcin with cocaine. The solution I usually employ contains 10 per cent. of resorcin and 20 per cent. of the hydrochlorate of cocaine. The addition of resorcin diminishes the toxic effect of cocaine, while at the same time it increases the anæsthetic effect of the latter, and it moreover prevents the cocaine crystallising out. The antiseptic properties of resorcin in the solution are also of value. I entirely disapprove of the use of the spray for applying cocaine to the nose. Nearly all the cases I have seen or heard of in which unpleasant effects have followed the use of cocaine have occurred when a spray has been employed. I apply the solution by means of cotton wool on a suitable holder, and do not use more than is absolutely necessary.

Recognising that the best antidotes for cocaine poisoning are ammonia and nitrite of amyl, I have these drugs always at hand. I was called in recently to see a somewhat alarming case of cocaine poisoning in the practice of a surgical friend. The nose had been freely sprayed with a 10 per cent. solution. In this case much valuable time was lost in sending to the chemist for the necessary drugs. If after the application of a solution of cocaine the patient becomes pale, giddy, or faint, I give him a drachm of the aromatic spirits of ammonia in 2 ounces of water, and, bearing in mind Kronecker's observation¹ that the act of swallowing removes the inhibitory action of the vagus upon the heart for the time being, I direct the patient to sip the draught. This usually suffices to remove the temporary discomfort; if not I let the patient lie down for a few minutes. Though I have capsules of nitrite of amyl at hand I have never had occasion to use them for any patient of mine, and since I have

¹ *Disorders of Digestion*, by Lauder Brunton, p. 11.