retained and not irritating, therefore 90 grams may be introduced during the twenty-four hours. From personal observation I can assert that 30 grams are absorbed without the production of glycosuria; I have not had the opportunity of making observations when 90 grams have been given.

Fat is not easily absorbed by the mucous membrane of the large intestine; of the 18 grams in the milk, invariably some has been returned in the wash-out enemata; the quantity has usually been extremely small (the apparatus at my disposal did not permit of my making an accurate estimate).

The heat value of the above diet is 578 calories. This may be increased by another 300 calories by the subcutaneous injection of sterilised olive oil; 30 or 40 c.cm. may be given daily. Those who have adopted this method of supplying the fat element of the diet have never observed any untoward symptoms, but have noted that the nitrogen metabolism has decreased, which proved conclusively that the fat had been absorbed and utilised. By the above methods half the necessary energy can be supplied, and the loss in weight can be reduced to 750 grams a week.

NOTE.

¹ Messrs. Parke, Davis and Co. have supplied serum, and are, I believe, prepared to supply it in future.

THE VALUE OF DIPHTHERIA ANTITOXIN IN THE TREATMENT OF MEMBRANOUS NON-DIPHTHERIAL TONSILLITIS.

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THE following instance of the same affection occurring within an interval of six months in the same patient seems worthy of recording:

History.—M. N., aged 35, with a good family history, in 1886 had rheumatic fever, and has also had influenza, pneumonia, pleurisy, and several bad attacks of muscular rheumatism and constantly recurring sore throat.

History of Present Condition.—On April 27th, 1900, she complained of headache, of shooting pains in the joints, sore throat, and general malaise. Her temperature was 103° in the evening. On April 28th, after a very bad night, with severe headache and aching in every limb, her throat was so bad and the difficulty in swallowing so great, and the general condition of affairs such that her husband, a medical man, asked me to see the case, as he questioned if it was not diphtheria.

Anamnesis.—On April 29th I saw her for the first time, this being the third day of disease. Upon examining the throat, I found both tonsils considerably swollen, and all but completely covered with a distinct yellowish membrane-like deposit, which had not touched the faucial pillars or the uvula. The pharynx was hyperæmic, the submaxillary gland was enlarged and very tender; the post-cervical chain was enlarged, but not tender. Her temperature was 103.8°. The heart sounds were normal, and the pulse regular. From the appearance presented, we came to the conclusion that if the case was not diphtheria pure and simple, it had a diphtherial element, and therefore decided to use antidiphtherial serum. The case was seen by the medical officer of health, who agreed with us on our line of treatment, and I notified the case. A swab was taken from the throat exudate for bacteriological examination. At 10 P.M. that evening she had a subcutaneous injection of 1,500 units of antidiphtheria serum (B. W. & Co.) in the interscapular region.

Progress.—On April 30th, about 10 A.M., after a much better night, she could swallow much more easily. Upon examining the throat, the condition of the tonsils was highly satisfactory; instead of a continuity of the membrane-like deposit, the deposit was now patchy; at 10 P.M. that evening her tonsils were absolutely clear, that is, within twenty-four hours from the time of injection, and she felt almost herself again. In another twenty-four hours she was up and about, and all she complained of was feeling very weak. The result of the bacteriological examination was negative as regards the diphtheria bacillus, but an abundant growth of streptococci were present.

Second Attack.—On September 23rd, 1900, I was asked to see the patient again. This time the cause of her throat trouble was traced definitely to a chill. The throat presented the following appearance: The tonsils were swollen, and in and around the orifices of the lacunæ were seen yellow, cheese-like deposits. I diagnosed the case as one of acute follicular tonsillitis, and ordered her sodii salicylatis, gr.xv, t.d.s., with a Listerine and carbolic acid spray for her throat.

On the following evening the husband asked me to see her. Her throat symptoms were again suggestive of diphtheria. I found both tonsils completely covered—I use the word “completely” advisedly—with a yellowish, membrane-like deposit, with a suspicion of its spreading up the faucial pillars; the uvula was adherent to one tonsil and the pharynx congested. There was more difficulty in swallowing in this attack than in the first. The submaxillary and cervical glands were enlarged and tender. Her temperature was 104°. She was sweating profusely, and the general phase of the case was such that we could not make up our mind as to a definite diagnosis, and, having due regard to the nature of the last bad throat and the rapid and brilliant result, we decided to adopt the same treatment. A swab from the throat was taken and sent up for

examination, and at 10.30 P.M. she received a subcutaneous injection of antidiphtherial serum (1,500 units) in the interscapular region. At the same time her mixture was changed to one of liq. hydrarg. perchlor. and liq. ferri perchlor., and her spray to 1 in 1,000 mercury solution.

On September 25th I saw her about 10 A.M., when I found that she had passed a fairly good night; that at midnight her temperature had fallen to 102.6°, at 6 A.M. it was 100°, and that at that hour her tonsils were noticed to be clearing up. On examination now her tonsils were patchy, but the general condition was one of marked improvement. At 6.30 P.M. the membrane-like deposit had vanished—that is, in twenty hours from the time she received the injection, and she felt practically well. She made a rapid recovery, and was up and about in a couple of days. The result of bacteriological examination was again negative—after twenty-two hours' incubation—only large colonies of streptococci being found.

I take it that these were two attacks of membranous non-diphtherial tonsillitis, the only definite predisposing cause for which in the second attack was a chill. We know that the diphtheria bacillus is not the only micro-organism capable of giving rise to a fibrinous exudation. Under suitable conditions the streptococcus, staphylococcus pyogenes, the colon bacillus, and the pneumococcus of Fraenkel produce inflammatory sore throats with fibrinous exudations. The greatest difficulty must therefore exist in making a definite diagnosis clinically, especially as the characters of the pseudo-diphtheria bacillus remains unsettled. Hence I maintain that in cases similar to these antidiphtherial serum should be used, judging from the results obtained.

MEMORANDA:

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

TRACHEOTOMY IN CASES OF THORACIC ANEURYSM.
In opening a discussion at the Medical Society on The Diagnosis and Treatment of Thoracic Aneurysm,¹ one of the points I suggested for discussion was, For what condition should tracheotomy be advised? The answers that were given to this question afforded little or no practical assistance, and as it is oftentimes a matter of the utmost urgency to settle whether tracheotomy should be performed, I was very glad to read the case recorded by Mr. F. W. Jollye.²

The only satisfactory way of deciding this important point is by the collection and examination of cases of aneurysm with laryngeal symptoms. Stenosis of the main air passage due to aneurysm may be brought about by spasm of the abductors of the vocal cords, paralysis of the abductors (these two conditions are often combined, there being a permanent state of abductor palsy with attacks of spasm) or by direct pressure of the aneurysm on the trachea.

When the obstruction is of laryngeal origin, as is the case in spasm or paralysis of the muscles of the vocal cords, then tracheotomy will be of use; but when there is direct pressure on the trachea, tracheotomy is of course useless. The difficult cases are those in which there is a double stenosis of the air passage, as for example, bilateral abductor paralysis combined with direct pressure on the trachea. If there be marked respiratory excursions of the larynx, the probability is that the obstruction is situated at the glottis, and consequently tracheotomy is indicated. The absence of respiratory excursions, on the other hand, points to tracheal stenosis. Unfortunately, this distinction is not uniformly maintained, hence the great difficulty of deciding as to the advisability of tracheotomy. It is therefore very important that cases of thoracic aneurysm, in which tracheotomy has been performed, should be recorded, and especially those cases in which the operation, as in the historical case of Earl St. Maur, has failed to relieve the patient.

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A CASE OF SPONTANEOUS VERSION.

THE following case may be of interest. I was called to Mrs. M. about 2 A.M., when she had been about six hours in labour. On examination I found the right hand protruding through the vagina, and the body of the foetus occupying the abdomino-anterior position. It was the thirteenth pregnancy, and the other twelve had been normal. I replaced

¹ BRITISH MEDICAL JOURNAL, 1900, vol. ii, pp. 1571 and 1710.

² *Ibid.*, February 9th, 1901, p. 339.