tonics whilst stimulating the heart increase the arterial tension the Nauheim treatment produces a dilatation of the peripheral vessels by the baths and of the muscle vessels by the exercises, thereby lowering arterial tension and giving the heart a comparative rest.

In conclusion, I would say that there is nothing new in the methods of procedure I have endeavoured to outline in this paper, but as I have not come across any similar description in the medical press, I trust that it may be of use to those who are anxious to give the Nauheim treatment a trial and that it may be the means of inducing some who have never practised it to do so, for I am convinced that, if given in the manner I describe, the Nauheim treatment is one of our most valuable therapeutic agents in the treatment of heart disease.

Inverness-terrace, W.

DIABETIC GANGRENE OF THE TOE; AMPUTATION OF THE TOE: RECOVERY.

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ON Sept. 17th, 1902, I was consulted by a stout elderly man who complained of the middle toe of his left foot causing him pain. Upon examination it was seen to be acutely inflamed and in a sodden condition, with a hard corn on the dorsal surface of the last interphalangeal joint. The history given was that the patient had always led a very active life and had enjoyed excellent health till about eight or nine years before when he had quinsy; since then he had always felt unduly sleepy and tired during the latter part of the day. He had had the corn for a number of years, but it had never caused him any trouble till about a month previous to his seeing me, when it became painful and the toe swollen, the pain frequently keeping him awake at night. The toe was washed with a solution of carbolic acid (1 in 60) and dressed with cyanide gauze, but the condition did not improve and by the 21st the skin covering the last two phalanges was purple in colour and sensation was somewhat diminished. By the 23rd this portion of the toe was quite black and there was an entire absence of sensation. Upon asking the patient if he had been suffering from inordinate thirst, had passed more urine than formerly, or had had an increased appetite, I received a negative answer to each question. His tongue was clean and moist, his teeth were good but much discoloured, and his bowels were opened regularly every day. The liver was not enlarged. The heart and lungs were normal; the pulse was 76, regular, of good volume and tension; the vessels were not thickened. The skin of both feet was somewhat harsh and dry. Upon examining the right foot the distal portion of the last phalanx of the middle toe was dark brown in colour, horn-like in structure, and devoid of sensation. The patient said that this toe had been in much the same condition for the last two or three years. The urine was rather pale in colour, acid, of specific gravity 1038, and contained much sugar, but no albumin or excess of phosphate, and no diacetic acid. Diabetic food and half a grain of codeia three times a day were ordered. The quantity of urine passed for a number of days averaged 80 ounces and the quantity of sugar 1440 grains, the amount not being diminished in spite of treatment. By the 26th the line of demarcation was forming on the dorsal surface at the first interphalangeal joint, whereas on the plantar surface it was as far as at the metatarso-phalangeal joint. The toe was now being dressed with boric lotion (ten grains to the ounce) and cyanide gauze. During this time the patient was taking his food well and sleeping well; his temperature was not raised and his pulse was 80. Pulsation could be felt in the dorsalis pedis and posterior tibial vessels, but it was weak.

From this date onwards the condition of things gradually became worse, the foot becoming swollen and inflamed and a most offensive odour proceeding from the toe. His temperature was 99.8° F. and his pulse was 90. By Oct. 4th the line of demarcation had completely formed and on the 6th Mr. H. F. Waterhouse came down from London in consultation and amputated the toe at the metatarso-phalangeal

joint. There was free hæmorrhage and a considerable amount of pus escaped. As the foot was in such an inflamed condition a counter opening was made on the dorsum of the foot and a gauze drain was passed through. The flaps of the wound were not sutured together, but it was well packed with cyanide gauze. After the operation the leg was kept well elevated and protected by a cradle. The distal phalanx was found to be completely necrosed. From the following day and onwards until the inflamed condition of the foot had subsided it was dressed with warm boric fomentations; since then with cyanide gauze and boric lotion (10 grains to the ounce). On the 8th the wound was again offensive and gangrene appeared in the deep part of the wound, but fortunately it did not spread to any great extent and by degrees separated in the form of a slough. After the operation the patient was ordered, in addition to the codeia, a quarter of a grain of hydrochlorate of morphia three times a day and within a few days from taking the morphia the amount of sugar in the urine became less; the dose of both drugs was increased until the patient was taking three grains of each daily. The wound and sinus filled up very slowly with granulation tissue and by Christmas they were quite healed, on which day the patient came downstairs for the first time since the operation. During the first week of being downstairs the urine was quite free from sugar, but ever since then there has been a slight amount present, the specific gravity being 1020. When the patient had been downstairs for a few days the dorsum of the foot became cedematous, and this condition persisted for about a month, but as this began to subside cedema began to appear in the leg and it still exists. During the latter end of January the gangrenous portion at the distal end of the middle toe of the right foot separated, leaving healthy skin underneath. Since the beginning of the illness in September small pustules and purpuric spots have frequently appeared on various parts of the body and extremities. The patient is now leading a fairly active life and is able to attend to his business.

This case presents several points of interest in that the classical symptoms of diabetes were absent: the patient was a stout man and had not lost flesh, had not suffered from thirst, increased appetite, or passed an excess of urine; moist gangrene occurred on the left foot, dry on the right, and the corresponding toes were affected as in Raynaud's disease. The patient had had no business or family trouble and all his relatives had been healthy, living to an old age, with the exception of a maternal uncle who died from gangrene, but whether diabetic or not is not known.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A CASE OF BLACKWATER FEVER TREATED WITH LIQUID EXTRACT OF CASSIA BEAREANA.¹

By DR. H. CORKE,

MEDICAL OFFICER TO THE ZANZIBAR GOVERNMENT IN PEMBA.

I RECEIVED an urgent call on Jan. 26th, 1903, to proceed to Weti, some 18 miles away, to attend a woman engaged in missionary work who was said to be suffering from blackwater fever. I accordingly saw her on Jan. 27th. She had been invalided home some years before for an attack of blackwater fever. She had been suffering on and off from attacks of ordinary malarial fever for some time previously to my seeing her and had been taking sulphate of quinine. I learned that on Jan. 26th her urine had suddenly assumed a very dark appearance and had become very scanty in quantity. Her temperature at that time was 105° F. She had pains all over the body and there was a tendency to jaundice. During the night of the 26th she had several fits of vomiting and she slept only in snatches of a few minutes at a time. On the morning of the 27th general jaundice was well marked, the conjunctiva being very yellow,

¹ A full account of the botanical characters and medicinal properties of cassia Beareana, by Dr. D. R. O'Sullivan-Beare and Mr. E. M. Holmes, F.L.S., was published in THE LANCET of Feb. 1st, 1902, p. 282.