

## SOME CASES OF "HYSTERIA" IN THE MALE SUBJECT.

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HYSTERIA in the male subject in its severer forms is, at any rate in this country, not of very common occurrence, and when unattended by typical phenomena, such as the convulsive seizure, is apt to be overlooked; indeed, the nature of such a seizure, when it occurs, may for some time be doubtful, even when the possibility of hysteria is borne in mind. In this connexion I use the term hysteria in its wider sense, as implying simply the absence of any evidence of organic lesion. I have therefore brought together the notes of four cases that I have seen during the last two years, which illustrate some of the more important forms which hysteria may assume. Two of the patients were boys.

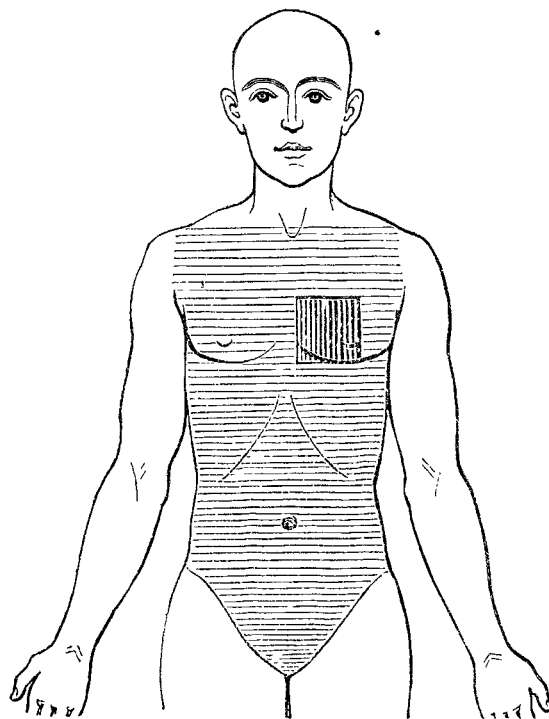
The first case may, perhaps, be most properly entitled one of prolonged hysterical trance, and affords a fresh example of the length of time during which food may be totally abstained from without danger to life. It is not even necessary that there should be complete rest of the skeletal muscles and their presiding nervous centres during the period of fast in order that the processes of dissimilation may be reduced to a minimum; no doubt this is attained in many cases by the state of torpor in which the patient lies; but in others, as in the one under notice, convulsions occur not infrequently, and must entail largely increased dissipation of muscular and nervous energy. In the second patient, a definite intracranial lesion in all probability existed and was recovered from, but on the unstable condition of the central nervous system thus engendered hysterical paraplegia and convulsions supervened. Two instances of contracture of limbs follow, the one occurring after the application of a plaster-of-Paris apparatus, the other without more definite exciting cause than a painful affection of the forearm. In the intensity of the contractures and their persistence the usual features of such cases were borne out.

The first patient was a boy aged eleven, seen in June, 1890. The family history was good, and no evidence could be obtained that any member of it had previously suffered from any nervous affection. The boy himself had always been healthy; there was no history of any injury, fright, or shock, and the only cause to which the illness might probably be attributed was an attack of influenza some two months previous to my visit. The present illness began two weeks afterwards. For one week he suffered from general malaise, loss of appetite, and headache; the latter increased in intensity, and his medical attendant, Mr. Knapp of Westbury, noted the occurrence of alternating, almost rhythmic, contraction and dilatation of the pupils. The symptoms at this time appeared to him to indicate a commencing attack of meningitis. He also complained of pain in the præcordial region, and there were constant movements of the left arm, in which the forearm was first extended, and then flexed and pronated, so as to bring the hand forcibly against the præcordia. He now passed into a semi-conscious state, refused all food, passed his urine and fæces into the bed, would not or could not speak, and could not be induced to reply when spoken to. After a little time the movements of the left arm became feebler, and were finally confined to the hand, which continued to make feeble to-and-fro motions. Irritation of the præcordial region brought on cries and screams of pain, often followed by attacks of tonic spasm of the limbs, which passed into opisthotonos, in which the patient was supported only by his head and heels. The hyperæsthesia, at first confined to the præcordial region, soon extended over the whole of the anterior surface of the trunk, but never affected the head or limbs; he screamed when touched anywhere on the abdomen or chest. He lay for the most part perfectly quiet, but from time to time tonic muscular spasm would supervene, passing into opisthotonos; during these attacks the eyeballs were in strong convergence. The boy remained in this state for three weeks, entirely refusing all food. The parents, who were constantly with him, were confident that he took nothing but water to moisten his lips during all this time, and it was impossible for him to obtain food without their

knowledge. Mr. Knapp also made careful inquiries into this matter, and so far as he could ascertain the parents' statement was correct. At the end of this period of three weeks the patient one day showed signs of returning consciousness, and, although apparently unable to speak, wrote on a slate that he should like some milk, beef, potatoes, cabbage, and pudding, and a day or two afterwards spoke and said that he could take some soup that he had had at an aunt's house the day before his illness. This occurred about ten days before my visit, and since then he had not spoken again, but had relapsed into the same unconscious condition, passing his evacuations into the bed. If touched on the hyperæsthetic area he would moan and cry, and if moved in the bed he had a convulsive seizure of brief duration, in which there was opisthotonos and convergent spasm of eyeballs. He now, however, took from time to time those articles of food which he had demanded on the slate, and indicated his need for food by gnashing his teeth together; all other kinds of nourishment he rejected. Throughout the illness there was no squint or ear discharge, and no pain in the head except at the onset.

When I saw him the patient was lying on his back; he was thin and emaciated, the abdomen rather swollen and tumid. Physical examination showed that the abdominal and thoracic organs were natural, and no abnormality was detected over the spinal column. The eyelids were half closed, the mouth wide open, the tongue dry and thickly coated, lying on the floor of the mouth; the right arm lay by his side and was somewhat rigid, the left was folded under his back. The legs were drawn up, and the flexors of the hip and knee strongly contracted. This contracture could not be overcome by the strongest force which I could employ, which elicited cries of pain; the toes were in a state of strong flexion. The right arm could be passively moved, but not freely. There was almost constantly a slight oscillating movement of the legs, and in less degree of the body, from side to side, and from time to time the muscles of the back became stiff, the spine was slightly arched and raised an inch or two from the bed, and the body swayed from side to side for a few seconds, the patient uttering low moaning cries, without moving the lips or tongue. During these passing attacks the spasm of the lower limbs was diminished.

The boy was lying naked except for a towel about his hips, as he could not bear the contact of the bedclothes, on account of the extreme hyperæsthesia of the skin of the chest and abdomen. This hyperæsthesia was so intense that an accidental light touch with my coat sleeve brought on a convulsive shudder, with tears and cries of pain. This hyperæsthetic area was limited to the anterior surface of the trunk, ceasing accurately at the groins below and at the



Shaded area of hyperæsthesia. Over vertical lines it was most intense.

level of the clavicles above. There was no rigidity of the neck muscles, and, in marked contrast to the rest of the body, the head and neck could be freely moved about and handled

without giving rise to pain. I could not induce a distinct fit by prolonged rubbing or pricking of any part of the chest or abdomen, but during these procedures the patient screamed loudly, and the opisthotonos and lateral trunk movements occurred more frequently. On lifting him from one side of the bed to the other by means of the coarse sheet on which he lay, a curious attack occurred, and could be invariably induced by shifting him in this manner. The movements of the legs above described entirely ceased, and he lay absolutely still; respiration also entirely ceased, and the pupils dilated without any alteration in the pulse, or muscular twitching or flushing or pallor of the face. After from twenty to forty seconds the attack appeared to end, there was slight opisthotonos, and the movements of the trunk and legs returned; he burst into tears and continued to moan and cry until he was moved again, when he at once became perfectly quiet and the above phenomena were repeated. During the "quiet" periods consciousness seemed to me to be quite lost; there was no conjunctival reflex, the hyperæsthetic area could be freely handled without exciting the patient's notice, and the muscular spasm in the legs relaxed, so that they could be nearly, but not quite, extended; if the attempt to extend them fully were persisted in the attack was brought to a close and the former rigidity of the legs returned. During the period of quiescence he could be raised to a sitting posture without cutting the attack short, but at once fell back if unsupported.

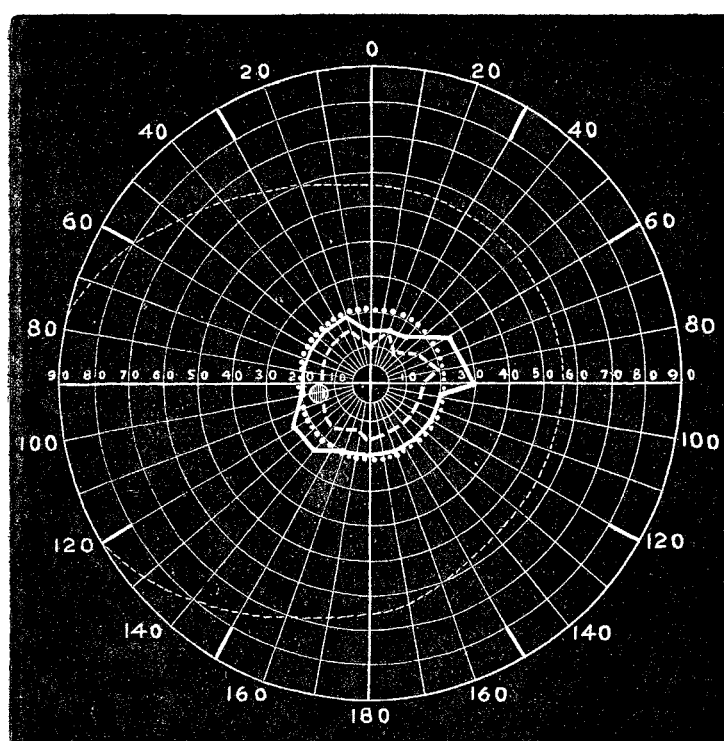
It remains to state that, although the muscles generally appeared weak and flabby, there was no atrophy of any. There was no paralysis of any cranial nerve. The fundus and optic disc in each eye were healthy; the left pupil contracted much more than the right to light thrown upon the eye from the mirror of the ophthalmoscope, and there was on both sides spasm of the orbicularis, so that the eyelids had to be held open for ophthalmoscopic examination. At times slight horizontal nystagmus was observed. The knee-jerks from the contraction of the limbs were not obtained, the plantar reflexes were absent, the other superficial reflexes brisk; pulse weak and small, 108 to the minute. By no means could I attract the patient's attention, or get him to betray in any way knowledge of my presence. My examination caused loud cries of pain, which still continued when I was leaving the house, and the father stated that after being moved he invariably cried for some time. From the history of the onset, with movements of flexion and extension of one arm, the general symptoms and progress of the illness, the presence of the hysterogenic zone, of hyperæsthesia not corresponding in distribution with the nerve-supply of the parts affected, the character of the convulsive attacks, accompanied as they were with opisthotonos and convergent strabismus, and the total absence of any sign of definite muscular paralysis or atrophy, and of optic neuritis, there could be no doubt that the case was of the graver type of hysteria, and I accordingly urged his removal to the hospital, in order that he might be taken from his surroundings and be put under new treatment. His parents, however, would not consent to this, as they were afraid of his dying in the hospital; some directions as to treatment were therefore given, and the opinion expressed that he would sooner or later recover. I did not see the patient again until the end of September, when I learnt that he began to improve within two or three weeks after my visit; the convulsions first ceased and consciousness returned, he began to take nourishment regularly, and slowly recovered strength, the contractures disappearing last. In September he looked a healthy boy, well nourished and sunburnt, with no trace of his former illness, except a little weakness of the legs. He was rather above the average in intelligence, and appeared to be bright and cheerful. I examined him carefully, but could detect no sign of disease; the reflexes were normal, there were no contractures of the limbs, no hyperæsthetic zones, nor areas of anaesthesia, and no contraction of the fields of vision. He assured me that he had never seen me before, and had no memory of anything that had passed during the period of his illness. In connexion with this, it will be remembered that, on the brief recovery of speech which occurred after the first three weeks of his illness, he asked for soup that he had had on a visit to an aunt the day before he was taken ill, and which he had much enjoyed, thus immediately recurring to the last event that had impressed itself on his memory before the attack, as if no mental impressions had been registered in the interval, and he had taken up his life anew from the point

at which he had dropped it, to pass into a semi-conscious state. In some respects his mental condition thus resembled some of the phases of the hypnotic or rather somnambulistic state; the characteristic features of the cataleptic state were not present.

The next case also concerns a boy aged eleven years. The parents were healthy and the family history good. The boy's health had always been good till within the last twelve months, when he began to fail, and to complain of pains in the back and head, and of dizziness. This went on for some time, until one day, on his way home from school, he suddenly became very giddy and fell; he lost consciousness for a few seconds, and found on recovery that he had struck and bruised his forehead. Subsequently he had several similar fits; he could always get up and walk away immediately after them, occasionally bruised himself in falling, but never sustained any severe injury, and never bit his tongue or passed urine unconsciously. The headache grew more intense and came oftener, and he had attacks of vomiting which bore no relation to the ingestion of food. In August, 1888, he complained of photophobia and of dimness of sight in the right eye, and was seen by Mr. Richardson Cross, who found optic neuritis of slight intensity in both eyes. In September the gait was somewhat staggering, and there was a tendency to fall to the left in walking. There was now double ankle-clonus; during this month he lost first the use of the left, then of the right leg, the pains in the back became more acute, and at the end of the month he could neither walk nor sit up in bed. Convulsive attacks now frequently occurred in which there were irregular clonic spasms of the muscles of the limbs and neck, while the body was thrown from side to side. These attacks were ushered in by a peculiar cry, and were accompanied by momentary loss of consciousness; they were apt to occur on any excitement, such as the entrance of a stranger or of the doctor into the room. In October, vision was nearly lost in the right eye and much impaired in the left; pupils rather dilated, equal, acted to light and accommodation; in addition, some loss of sensation was noted over the legs; the head was jerked from side to side when raised from the pillow; there was never any rigidity of the muscles of the neck. The fits occurred more frequently—five to ten a day—and after them the power of speech was lost for some hours, and there was difficulty in swallowing liquids; he was not himself aware when the fits occurred. In November absence of colour sense was noted (left eye), a coloured patchwork quilt appearing dirty grey. On January 11th the character of the fits was noted as follows: head thrown back, eyeballs elevated, pupils dilated, loss of consciousness with noisy crowing inspiration, accompanied by general flexion of limbs and further extension of head. The twitching of the mouth did not now occur. The progress of the illness up to February, 1889, when I saw him was briefly this: that he remained paraplegic, could not stand or walk, and was carried from his bed to lie on a couch during the day; he complained of giddiness, headache, and cramping pains in the calf muscles; the convulsive attacks occurred several times a day, and there was occasionally a fit of vomiting. Micturition and defecation were normally performed throughout the illness. For notes of the illness as given above I am indebted to Dr. Wilding, who carefully watched the case.

When I saw the patient, a pale, delicate lad, thin but fairly well nourished, he was lying on a couch with the legs flexed at the hip and knee, and crossed the one over the other; the feet were adducted, resting on their outer borders. The adductors and flexors of the thigh and the flexors of the knee were strongly contracted, so that the legs could not be passively extended. He could only draw the limbs very slightly upwards, could make no movement of extension, or raise the feet off the couch. There was defective perception to pain over the legs, and also to heat, but not to cold; tactile sensation was very slightly deficient; elsewhere over the body sensation of all kinds was normal. The knee-jerks were somewhat exaggerated, and slight ankle-clonus could be obtained on each side. The plantar reflexes were absent, the other superficial reflexes normal. There was no paralysis of any other muscle. The reaction to the faradaic current was everywhere good, the patient, however, strongly objecting to it. On my entrance he had a fit, and several during my visit, each of a few seconds' duration. The head was turned to the right, then thrown back with a peculiar cry, apparently produced by inspiration through a partly

closed glottis. In one or two of the fits the body was partly turned over and moved towards the right, suggesting an approach to pleurosthotonos. I observed no movement of the eyeballs or pupils, no change in the pulse, respiratory movements, or colour of the face during these fits. Eyes: No oculo-motor paralysis; field of vision in the left much contracted, as the accompanying chart shows, for white, red, and blue, with the right eye he could just count fingers. Ophthalmoscopic examination showed fulness of retinal veins in each eye, with indistinctness of the border of the left optic disc, with no other sign of neuritis or atrophy. Except for some tenderness over the lower dorsal region, the spinal column was normal. He had difficulty in swallowing, attempts to swallow bringing on laryngeal spasm, so that he had to give two or three gulps to swallow one mouthful of milk. Hearing, taste, and smell were normal. The boy was admitted into the hospital, and his friends very sensibly undertook not to visit him until they received permission. Shortly after admission he had a fit, but as no notice was taken of it, he had no more. Next day he was able to extend his legs, and in a few days, though weak, he could get up and walk about the ward, and looked much brighter and better. The difficulty in swallowing persisted for about a week; it was found that he could swallow much more easily if the back of his head were supported, and with help in



Thick line, field for white; interrupted line, field for red; dotted line, field for blue.

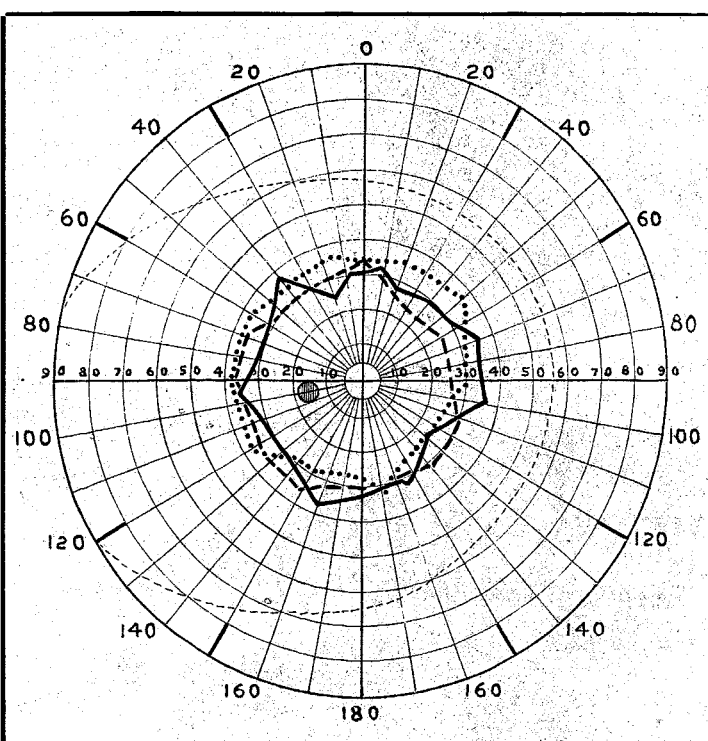
this way, and encouragement to persevere in overcoming it, this difficulty also disappeared, so that in from two to three weeks he was practically well, and we were able to send him home in a satisfactory condition. The loss of vision remained practically unaltered. He came to see me in the following May, and was then a healthy-looking, intelligent boy; a chart of the field of vision of the left eye at this date is appended, showing some improvement in this eye; the condition of the right was unchanged. His appetite was good, he could walk well, and had no headache, sickness, or difficulty in swallowing. He has remained well since then.

In this case the occurrence of optic neuritis, with subsequent great defect of vision, the attacks of vomiting, headache, and giddiness, with the earlier fits, which seemed to me to have been epileptiform in character and of different nature from those that occurred later, renders it probable that there was at first an intra-cranial lesion, and the most likely cause of such symptoms in a boy of his age would be either meningitis, or, judging from some of the earlier symptoms—the staggering gait, tendency to fall to left, &c.,—a small tubercular tumour in the cerebellum, and that this was recovered from. Instances are on record where the symptoms, on the one hand, pointed to the occurrence of meningitis, and, on the other, to the presence of a tumour, and yet the patients

recovered.<sup>1</sup> In the preceding case the intense disturbance excited by the lesion may be supposed to have given rise to the paraplegia of functional origin, and to the other hysterical manifestations which, apart from the visual defects, were the only remnants of his illness at the time of my visit.

In both these patients after recovery I was struck with the clear, intelligent answers they gave to my questions, and the entire absence of signs of the mental state usually associated with hysteria; contracture of the lower limbs was much the same in both, with exaggeration of deep reflexes and absence of plantar reflex. The next two patients suffered from hysterical contractions of limbs only, the one of the leg, the other of the forearm.

The former was a youth of eighteen, who stated that twelve months previously he had had an injury (severe sprain) to the right foot, for which it was put up in plaster-of-Paris. When the plaster apparatus was removed the foot was found to be fixed in the position described below, in which it had remained ever since, incapacitating him from work; there was also said to be loss of sensation over the foot. Beyond a tendency to consumption on the mother's side, the family history gave us no information. His own history was important, as he gave a distinct account of an attack of left hemiplegia and hemianæsthesia at the age of twelve. He complained of attacks of palpitation, but had never suffered



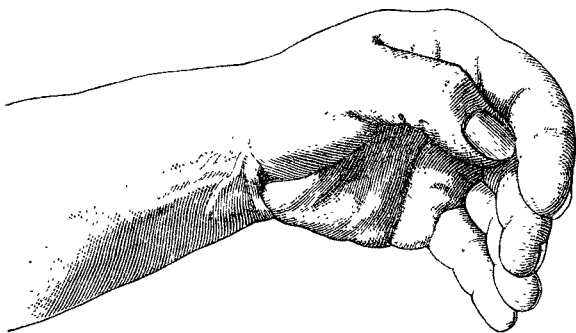
Thick line, field for white; interrupted line, field for red; dotted line, field for blue.

from fits of any kind, or from headaches. The muscles generally were flabby, and he was anæmic. The foot was fixed by muscular spasm in a position of extreme talipes equino-varus; after steady firm pressure kept up for some time, the foot could be brought into the normal position, and the same result could be attained by strong faradisation of the external popliteal. He could not, however, move the foot himself. There was some loss of sensation to pain, but not to touch or temperature, over the foot, but this partial analgesia had disappeared on the following day. The plantar reflex was absent on the right side, the other superficial reflexes present, the knee-jerks brisk, and the muscles generally acted too readily to direct percussion over them. There was no contraction of the visual fields, or affection of any of the special senses. He recovered the use of the foot, and the spasm disappeared in two days, after treatment with a strong faradaic current.

The other patient, an ironworker, aged twenty-six, complained of inability to move or use the right hand and wrist for two weeks. He was a strong man of healthy appearance, the family and previous history were good, he had

<sup>1</sup> Vide Bristowe: Lecture and Essays on Diseases of the Nervous System, chap. xl.; and Graves' Diseases of the Nervous System, vol. ii., p. 484.

never had syphilis, and did not drink. The affection began with severe pain at a spot about the middle of the anterior surface of the forearm, followed by stiffness and difficulty in moving the wrist-joint, which rapidly increased until all use of the hand and wrist was lost. His work was heavy, and consisted in shovelling coal. There had been no injury of any kind to the limb. On examination the wrist was slightly extended and the hand adducted; the flexor tendons at the wrist were also rigid and prominent under the skin, the fingers were flexed at the metacarpal, and extended, though not fully extended, at the phalangeal joints; the thumb was flexed at all joints and adducted so as to be bent in towards the palm of the hand. The hand was persistently blue and cold; there was no wasting of any of the muscles. Both wrists and fingers were rigidly fixed in the above-described position, and could not be moved; attempts at passive movement gave rise to pain, felt in the wrist, but most acutely at a point three inches above this joint on the flexor surface of the forearm, and at this spot there was a small area, over which the skin was hyperæsthetic; elsewhere sensation of all kinds was normal. He could very slightly move the fingers, but otherwise could not move the hand at all. Flexion of fingers also gave rise to pain at a point on the posterior and inner aspect of the arm, just above the internal condyle. The electrical reactions showed slight diminution to both forms of current, as compared with the left arm. The progress of the case was slow and tedious, and he complained much of pains in the hand and forearm; he very gradually improved, the spasm slowly decreasing and finally disappearing. After about ten weeks' treatment he recovered the use of the limb, was able to return to work, and, so far as I know, has not relapsed. The measures adopted were hot fomentations for the relief of pain at first, with massage and faradism to the affected muscles; subsequently blisters were applied over the seat of the pain; iron and quinine, bromide and valerian, were given internally. No satisfactory reason for the pain in the forearm could be made out. He was carefully examined as to the presence of some of the more characteristic phenomena generally present in hysteria, but no modifications of the general or special senses—other than the hyperæsthetic patch on the forearm—could be at any time determined. An engraving from a photograph of the position of



the hand is appended. On looking up the case afterwards I found descriptions and figures of similar contractures by Professor Charcot,<sup>2</sup> one occurring in a blacksmith and affecting the left hand seven weeks after he had received a slight burn on the forearm and back of the hand; the other two patients were women.

Clifton.

## THE ANTI-FERMENTATIVE TREATMENT OF INFANTILE DIARRHŒA.<sup>1</sup>

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INFANTILE DIARRHŒA may be a symptom of many diseases, such as dietetic, parasitic, tubercular, syphilitic, miasmatic, and local diseases, or it may result from diseases of defective nutrition. I propose in this communication to discuss only the causation and the treatment of that variety of acute infantile diarrhœa that is caused by irritative products resulting from fermentations produced in

milk either previously to or after ingestion. The majority of the cases of this kind occur in infants who are being reared on cow's milk, and, although they occur at all seasons of the year they are far more common during the summer. The infant is restless and irritable; the tongue is generally coated with a white fur; the diarrhœa is severe, and is frequently accompanied with vomiting and signs of abdominal pain; the motions are watery, usually greenish at first, with lumps or flocculi of curd in them; later they may become lighter in colour, or even may resemble the rice-water stools of cholera or of arsenical poisoning. In some of the cases marked nervous prostration is present. The causation of this variety of acute infantile diarrhœa has been attributed by various authors to undigested caseine, to the action of bacteria, to acid fermentation, to alkaline fermentation, to poisonous ptomaines, or to catarrh of the intestinal mucosa set up by the above-mentioned or other irritants. Bednar was one of the earliest writers who put forward the theory that primary abnormal decomposition of food was a cause of diarrhœa in children. Escherich found by the aid of Koch's method of cultivation that the bacterium lactis determined strong lactic acid fermentation in carbohydrates, and especially in milk sugar, but that this bacterium does not split up albumen. On the other hand, according to Baginsky, in a paper read before the Berlin Medical Society in 1888, the bacterium lactis produces only very small quantities of lactic acid, most of the acid formed being acetic acid; moreover, cultivation experiments show that the formation of acetic acid, when it exceeds a certain limit, destroys this bacterium, so that if the bacterium be sufficiently active it dies, so to speak, by its own hands, killed by its own products. Experimentally, it is found that a trace of calomel in the gelatine prevents almost entirely the growth of this bacterium, and this may explain the undoubted usefulness of calomel in sudden diarrhœa in children, due apparently to fermentation of milk sugar in the milk-supply.

Now, although I do not for a moment deny that several irritating substances resulting from the fermentation of milk may be factors in the production of this form of acute infantile diarrhœa, yet my contention in this paper will be that the principal share of the blame rests with the milk or cheese ptomaine, tyrotoxinon, produced during the fermentation of milk under certain conditions. I will therefore here give a brief description of this body. In 1883-84 300 cases of cheese poisoning were reported to the Michigan State Board of Health. The symptoms were vomiting, diarrhœa with watery stools, occasional pain in the region of the stomach, tongue at first white, red and dry later on, pulse feeble and irregular, countenance pale with marked cyanosis; dryness and constriction of the throat were complained of by all, and in a few cases the diarrhœa was followed by marked nervous prostration. In the majority of the cases no fatal termination occurred. From the symptoms many of the cases were at first diagnosed as arsenical poisoning. In all these cases the cheese was apparently in good condition, and there was nothing in the taste or odour of it to excite suspicion. From some of these cheeses Victor Vaughan extracted a crystalline ptomaine which he named "tyrotoxinon," and which he found was capable of producing the symptoms described above as characteristic of poisonous cheese. He later on extracted tyrotoxinon from milk that had stood in stoppered bottles from three to six months. He found that tyrotoxinon administered to a cat produced vomiting and watery stools, with subsequent immediate retching and vomiting whenever it lapped a little milk. This condition continued for three days, when the animal was placed under ether and its abdominal organs examined. The stomach and intestines contained a frothy, serous fluid, such as had formed the vomited matter, and the mucous membrane was very white and soft; there was not the slightest redness anywhere along the alimentary canal. Similar results in several other experiments on lower animals were obtained by the same observer. It may be mentioned here that the chemical constitution of tyrotoxinon is known; it has been shown by Victor Vaughan to be identical with diazobenzol ( $C_6H_5N_2$ ).

Many remedies have been employed in the treatment of infantile diarrhœa with the view of arresting the abnormal intestinal fermentation. Carbolic acid, creasote, resorcin, salicylate of soda, salicylic acid, naphthol, and salol have

<sup>2</sup> *Maladies du Système Nerveux*, vol. iii., leçons vii. and viii.

<sup>1</sup> A paper read before the Harveian Society, Nov. 7th, 1889.