

a distinct alkaline reaction is produced in litmus-tinted media by the third day. In spite of the assertions of several observers, including Durham, to the contrary, I am convinced that this organism possesses the power of voluntary movement. The motility which may be seen in a broth emulsion from a young gelatin or agar culture is distinct from Brownian movement. Moreover, by subjecting the organism to flagella-staining, either by Pitfield's or by Van Ermengen's method, I have succeeded in proving the presence of flagella. In successful preparations it will be found that the majority possess one terminal flagellum; several have two, one at either end or two at one end; a few have three; and rarely four may be counted on a single microbe. The micro-photographs (Figs. 1 and 2) show specimens with flagella, including one with four.

In view of these results I would suggest that *micrococcus Melitensis* is allied to the alkali-producing type of *bacillus coli* which I have described.³

In the *Centralblatt für Bakteriologie*, Band No. 22, 1897, I noted that *bacillus pestis* was possessed of one terminal flagellum, sometimes two, and also that the motion displayed by this organism was distinct from Brownian movement. Since then I have on one occasion seen two plague bacilli move right across the field of the microscope and then change their direction.

The culture which I have been using was kindly given to me by Dr. Klein. It came originally from a fatal case of bubonic plague. Dr. Klein⁴ has fully described this organism both with regard to its morphological and pathogenic characteristics. As regards flagella it is commonest to find one terminal flagellum. This is sometimes long and wavy, at others short and straighter (vide Figs. 3 and 4). Organisms showing two flagella are sometimes seen, in which case either there are two at one end or one at both ends. The most I have yet counted on a single organism is three, and this is uncommon.

It is by no means easy to obtain flagella specimens of either plague or Malta fever. Several unsuccessful trials are as a rule necessary. The method which I have found most trustworthy is Van Ermengen's with the following modifications: (1) the reducing agent—i.e., the tannin and gallic acid solution—must be several weeks old and (2) specimens should be left for double the prescribed time in the mordant, for from one and a half to three minutes in the first silver solution, from two to three minutes in the reducing agent, and in the last silver solution until the film begins to darken. Sometimes good preparations are obtained by washing in distilled water between the baths. Again, it is sometimes advisable to reverse the order of the baths. I may add that it is unnecessary to boil the cover-glasses in the bichromate solution. Strong heating on a metal tray which is moved about over a blowpipe flame is quite sufficient, provided that the cover-glasses have been wiped absolutely clean with a handkerchief. I have to thank Mr. A. Norman for taking the micro-photographs.

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³ Ibid., June, 1897.

⁴ Report of the Medical Officer to the Local Government Board, 1896-97.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.—

On Feb. 23rd Dr. Farquharson, M.P., received a deputation from the Council of the Poor-law Medical Officers' Association. The honorary secretary having introduced them said they desired to lay before him their views as to the necessity for the formation of a common or central fund from which Poor-law pensions might be paid; also to point out to him the hardship and injustice entailed by the present Act upon a large number of district medical officers who, because they do not and in many cases cannot reside in their districts are subjected to an annual or triennial re-election.—Dr. Major Greenwood, speaking at some length, pointed out that the only way of making the Superannuation Act workable was by creating a central fund.—Mr. Holder of Hull spoke on the injustice to the whole Poor-law medical service by reason of the appointment of medical officers by yearly tenure only, also upon the inadequacy of the remuneration of many urban district medical officers.—Mr. Balding and others having spoken Dr. Farquharson said he thoroughly sympathised with them and thought that a central fund would remove a good many of the difficulties and he would do all he could to help them.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

REPLACEMENT OF A SEVERED PORTION OF THE NOSE.

BY W. M. ABBOT-ANDERSON, M.B., B.S. DUNELM,
M.R.C.S. ENG.

THE patient was a man, aged 30 years, who had injured himself with a knife used for cutting sandwiches whilst he was in the act of sharpening it on a steel. In so doing he struck his nose over the nasal bones and the knife glancing off these cut through the skin and shaved off a piece of the integument measuring one and a quarter inches from above downwards. The breadth of the base of the triangle was half an inch, the apex being over the nasal bones where the knife struck. Immediately after the accident, finding his nose bleeding, he ran to a druggist who sent him on to me. He was not aware at this time of the fact that he had cut off part of his nose and he waited with the page boy in my waiting-room for fully 15 minutes. I then examined the injury and asked the patient if he could produce the piece. He was not sure, but on the off chance the page boy was sent back to see if he could find it. In about 10 minutes he returned with the missing portion of the nose which he had found on the kitchen table. The second cook had seen it there, but he took it for a piece of calf's head or pig's ear. It was brought to me wrapped in a piece of white kitchen paper. During the boy's absence I carefully bathed the raw surface with a one in 2000 perchloride solution. The piece of nose was thoroughly washed in a warm saturated solution of boric acid and it was fixed in place by 12 silk sutures. From the time it was cut off until the time it was applied was fully 35 minutes and when it was brought to me it was thoroughly blanched. For four hours after the sutures were placed in position I applied every five minutes or so a fresh hot compress of boric lint wrung out in boric solution and to this fact I attribute the success of the small but interesting experiment. When the patient was leaving my consulting-rooms I dressed his nose as follows: (1) powdered euophen; (2) a piece of green protective; (3) wet boric lint wrung out in boric solution; (4) dry boric lint; (5) double cyanide wool; (6) gonorrhoea bag to act as a muff; and (7) bandage. The wound united by first intention all round and the stitches were removed on the fourth day and subsequently for ten days the patient wore some slight protection to keep the part warm.

Wimpole-street, W.

BRADYCARDIA IN INFLUENZA.

BY HEINRICH OPPENHEIMER, M.D. HEIDELB.,
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THE causes of an abnormally infrequent pulse, as usually given in the text-books, are aortic stenosis, fatty heart, jaundice, and meningitis. It is not so well known that it is characteristic of some influenza epidemics, yet an extreme slowing of the pulse is by no means rare in quite uncomplicated cases. I observed a marked pulsus rarus in many cases of influenza which have come under my notice during the present year, and in three of my patients it formed so prominent a symptom that I feel justified in publishing their history.

CASE 1.—The patient was a man about 24 years of age who on Jan. 24th fell suddenly ill with severe headache, pains in the back and limbs, general malaise, anorexia, and laryngeal cough. When first seen his temperature was 101.2° F. and his pulse was 72. The relative infrequency of the pulse—i.e., its failing to be accelerated in proportion to the rise of temperature—struck me as peculiar. A cachet containing four grains of bromide of quinine and eight grains of salophen to be taken twice a day was prescribed. On the next morning the temperature was 97° and the pulse was 58, the cough was much better, the headache had

subsided and the pains "all over the body" were somewhat relieved; but there was constipation (for which some simple saline aperient was given), complete loss of appetite, flatulence, and a bad taste in the mouth. On the 26th the temperature was very slightly subnormal and the pulse was 48; the gastric symptoms were as well marked as on the previous day. As the patient was subject to repeated attacks of double otorrhœa and as a severe headache had recurred I thought for the moment that some meningeal mischief might be impending, but the absence of other more pronounced signs and symptoms soon dispelled my apprehension and made me inclined to think that jaundice might develop, the more so since the skin and conjunctivæ showed a slight yellowish tint, but the tests for biliary pigment in the urine gave a negative result. I discontinued the cachets and prescribed small doses of quinine in an acid vehicle. The condition remained much the same for the next two days, but on the 29th the patient felt so well that he got up in opposition to my advice. This was followed by a further decline in the pulse-rate from 45 to 40. I sent him back to bed, but it was not until after the lapse of five days that the pulse rallied though stimulants had been freely given. There was a feeling of profound prostration which did not subside until the pulse was 56 or 58. The patient was kept in bed till Feb. 5th and he has recovered since though there is still some general weakness left.

CASE 2.—The patient was a woman, aged 27 years, who had never been ill before. On Jan. 28th she fell ill with shivering, violent vomiting, headache, pains in the back and limbs, and pains in the stomach, soon followed by severe diarrhœa. The temperature was 97.4° F. and the pulse was 56. On the 29th the prostration was so well marked that she fainted when sitting up in bed. The temperature was 98° and the pulse was 48. On the morning of the 30th her condition was the same, but there were now constipation, flatulence, furred tongue, a very bad taste in the mouth, and pains behind the eyes. Under the free use of stimulants she made a rapid recovery so that she was able to leave her bed on Feb. 3rd. The pulse showed a marked reaction, 82 being counted at the wrist.

CASE 3.—The patient was a woman, aged 48 years, who, though subject to gout, was otherwise healthy. She first sent for me on Jan. 31st when I found her very prostrate, with pains all over the body, anorexia, a furred tongue, dry lips, constipation, flatulence, and cough. The temperature was 99° F. and the pulse was 80. On Feb. 1st, the bowels having been relieved, she felt somewhat better though she was extremely weak. The heart was beating at the rate of 60 per minute and the temperature was 97°. During the following days the pulse rate was gradually reduced to 45, while the temperature was subnormal, varying between 96° and 97.2°. Champagne was ordered in large doses and brandy was given at regular intervals. On the 5th the pulse showed some improvement and on the 8th the patient was able to leave her bed, the pulse-rate being 68 and only some weakness remaining.

I may add that in these three cases, as well as in several others in which there was marked bradycardia, though not so extreme as in those described, all the organs were healthy and there was not the least sign of heart disease. In my experience the pulsus rarus is most pronounced in those cases where there is influenza of the gastro-intestinal type. Of course, bradycardia is frequently observed in states of exhaustion, particularly during convalescence from acute fevers. But in influenza bradycardia is not only met with during convalescence from a severe attack but as an essential sign on the height of the paroxysm. It is usually accompanied by a subnormal temperature, though there is no necessary relation between the range of temperature and the pulse-rate. But in the absence of all other signs there is very marked prostration inversely proportionate to the frequency of the heart-beats. I do not think that the slowing of the pulse is the outcome of the general weakness or *vice versa*, but that both bradycardia and constitutional exhaustion are the result of the same cause—the poisoning of the system with the products of influenza or of the influenza germs, for I have not the least doubt that the pulsus rarus is due to the immediate action on the pneumogastric nerve or on the ganglia of the heart by the influenza toxins and bearing this in mind it is imperative to keep the patient in the recumbent position, though all other indications of the disease have disappeared, until the pulse has rallied in order to give the heart the highest possible degree of physiological rest.

Swiss Cottage, N.W

A Mirror

OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. MARYLEBONE INFIRMARY, NOTTING-HILL, W.

TWO CASES OF IDIOPATHIC DILATATION OF THE COLON.

(Under the care of Mr. JOHN R. LUNN.)

THAT there are cases in which portions of the large intestine are found enormously distended and yet no source of obstruction is discoverable is now generally admitted, but the true cause of this curious condition is doubtful. It is often attributed to chronic constipation which is always found in these cases, but the constipation is in all probability the result and not the cause of the dilatation. The nervous theory is the most inviting. One curious point is that the dilatation is sometimes limited to a part of the colon and does not involve the whole of the large intestine. The fact that the muscular walls are in some cases at least distinctly hypertrophied indicates that there has been increased pressure in the bowel, but the true significance of this fact is not clear. For the notes of the cases we are indebted to Dr. H. Sinigar, assistant medical officer.

CASE 1.—A woman, aged 86 years, was admitted into St. Marylebone Infirmary in October, 1897, for bronchitis, but she was found to be also suffering from marked abdominal distension. She was a well-nourished woman who, owing partly to the bronchitis and partly to the abdominal distension, had to be propped up in bed. She gave a history of simple constipation with no attacks of diarrhœa and no loss of blood from the bowel. There was enormous distension of the abdomen which was tympanitic all over and not tender. Peristaltic action of distended coils of gut could be distinctly seen through the abdominal walls; no tumour was felt in the abdomen. Rectal examination revealed ballooning of the rectum, absence of rectal stricture or growth, and the presence of an enlarged, hard, and globular uterus of about the size of a fist. She had considerable bronchitis, the heart's apex beat was displaced outwards, and there was an apical systolic murmur. The liver and spleen were not enlarged. The constipation was successfully treated by enemata and castor oil. Charcoal was given by the mouth with the view of lessening the distension, but without any beneficial effect. She remained in the same condition for some months, complaining at times of abdominal pain which always appeared to be due to a temporary increase of the distension. She died from bronchitis and heart failure in March, 1898.

Necropsy.—On opening the abdomen at the post-mortem examination the distended coils were seen to consist of large intestine only, the small gut lying hidden behind. The distension began at the cæcum and included the whole length of the colon and rectum. The transverse colon was much increased in length and was tortuous. No growth, stricture, or compression of any part of the intestinal tract could be discovered. The mucous membrane appeared to the naked eye to be normal everywhere and the muscular coats were only slightly thickened. There were no scybala in the colon or rectum nor was there any evidence in the gut of previous fæcal impaction. The circumference of the distended colon was about 15 inches. The uterus was retroverted and contained a calcified fibroid, but this was not so large as to fill up the pelvis. There were no marked changes in the other viscera.

CASE 2.—A woman, aged 66 years, was admitted into St. Marylebone Infirmary for obstruction of the bowels on Oct. 11th, 1898. She was very emaciated, with an anxious expression, sunken eyes, dirty complexion, and sordes on the lips and tongue. The history obtained from her husband was that she had been fairly healthy until six years before admission. Then she began to be troubled with flatulence