# **Graves's disease and peripheral neuritis.**

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Wellcome Collection 183 Euston Road London NW1 2BE UK T +44 (0)20 7611 8722 E library@wellcomecollection.org https://wellcomecollection.org obvious advantages, and by imperceptible means become on their part warm and perhaps able, if not altogether sincere, supporters of it. Lastly, there is a third set to whom cycling comes as a business. For the sake of saving time, or of carrying loads or other useful task, they train themselves into cycling labours and cycling habits—become, without offence, cycling animals—and find they can perform labours otherwise impossible with comparative immunity from injury. The evidence which men of science can alone accept lies between these three sources, the last probably affording the best; and the evidence is to the effect that, excluding those who are not fitted by constitution to ride at their own physical and mental expense, cycling is as safe as any other exercise if it be taken in a moderate and common-sense manner.

# TWO CASES OF DEATH DURING THE ADMINISTRATION OF CHLOROFORM.

WE regret to again have to chronicle two of these sad catastrophes-one at Cardiff and the other at Halifax. The circumstances of the Halifax case are as follows. The patient, a female aged seventy, was put under chloroform in order to remove a small malignant growth from the left labium major. A similar operation had been performed some five months previously, also under chloroform, and with success. The second operation was entered upon at the patient's request, the attendant pain being so intense. An examination preparatory to the second administration showed the patient, who was in good health and spirits, to have a regular and strong heart beat and pulse, with absence of any abnormal sounds in the chest. She was somewhat corpulent, and the cheeks were a little puffy and lax. Chloroform was administered on a single layer of lint, a few drops at a time at short intervals. The left temporal artery was kept under constant observation, and all the ordinary precautions were taken. The patient took the vapour well for about ten or twelve minutes, the breathing and heart's action remaining regular and unembarrassed, and the pupils acting to light and touch. Increase in rapidity of breathing and some movements of the limbs indicated the stage of excitement, which lasted about a minute and a half. Unconsciousness then followed, the pulse and breathing still remaining good and the pupils contracted and insensitive. The operation was then commenced, and when, upon the primary incision round the growth being completed, the patient suddenly stopped breathing the pulse at the wrist disappeared, the pupils rapidly dilated, and the face became cyanosed. The operation was at once stopped, the tongue drawn out, and artificial respiration resorted to. The heart sounds were perceptible for some five minutes after the breathing had stopped. Nitrite of amyl, hot and cold water, and hypodermic injection of ether and brandy were resorted to, but all in vain. Artificial respiration was kept up for about an hour, but there was no reappearance of the pulse or lessening of cyanosis. Death, it appeared, resulted from paralysis of the respiratory centre. The reasons for giving chloroform in preference to ether were the successful administration on the previous occasion, the fact that she had suffered from a little bronchitis in winter times, and the desirability of avoiding vomiting after the operation. Duncan and Flockhart's chloroform, sp. gr. 1497, was used to the total amount of three drachms and a half to four drachms. The patient had been properly prepared for the operation. No necropsy was made, but an inquest was held. and a verdict in accordance with medical evidence was returned. The case at the Cardiff Infirmary has, it will be seen, points in common with the Halifax case, and certainly no efforts towards resuscitation were spared. The patient in his case was a female aged twenty-eight, married, childless, id was admitted to the Infirmary on July 25th, suffering

from gastric ulcer. Certain symptoms rendered it desirable that a vaginal examination should be made under an anæsthetic, and on Aug. 24th chloroform was administered on a single thickness of lint from a drop bottle. Not half a drachm had been given when the patient, who had passed through a short struggling stage, became pallid, respiration took place by short gasps, and the pupils became dilated, although but a second or two previously the patient had been moving. The administration was immediately discontinued, the head was lowered, the foot of the bed was raised, and the tongue was drawn forward. The heart was at once listened to, and its sounds could not be heard. Natural breathing ceasing, artificial respiration was commenced. Brandy and ether were injected under the skin, and an enema of brandy was given; flannels wrung out of very hot water were applied over the heart, and hot bottles to the extremities. The patient was inverted. The interrupted current was used with both poles over the heart and also with one pole over the diaphragm and the other over the phrenic nerve. Two aneurysm pins were fixed to the battery terminals and passed into the heart itself through the chest wall. Artificial respiration was kept up for one hour and a quarter, but all efforts to restore animation failed. No steps had been taken to commence the examination of the patient, who had not been disturbed in bed. The heart had been several times examined previously, and no abnormality, functional or organic, was detected. A limited post-mortem examination was made, and the heart cavities were found to be empty and the walls somewhat thin and flabby, but the muscle was of a good colour, and there was no excess of fat. An inquest was held on Aug. 25th, and a verdict of death from failure of the heart's action under chloroform was

### THE CREMATION OF INFECTED AIR.

Some twelve years ago Professor Burdon Sanderson, in his evidence before the Royal Commission upon Small-pox and Fever Hospitals, suggested that the risk of aerial convection of disease might be met by disinfecting the air passing from infectious wards. He proposed that the foul air should be drawn along definite channels and sterilised by exposure to heat. In view of the steadily increasing body of evidence which goes to show that, as regards small-pox at all events, the danger is a real and pressing one, attempts have been made of late to carry this suggestion into practice, and notably in the hospitals recently erected by the Nottingham, Barnsley, and Bradford Corporations. How far these attempts have been successful may be learned from a memorandum just issued by the Local Government Board, in which Dr. Barry recounts the results of a series of careful experiments made at each of the institutions in question. In each case the architect had sought by means of furnaces in the course of the outlet shaft to secure the double object of artificial ventilation by extraction and the "cremation" of the outgoing air. At Barnsley and Nottingham gas-furnaces were employed for the purpose, and air was admitted to the wards by windows and ordinary inlet-ventilators, while at Bradford extraction was effected by a powerful furnace to which the outlet flues were conducted, and special inlet flues were provided through which alone air was permitted to enter. In the two former places the results were in no sense satisfactory. The extraction was insufficient to prevent occasional outflow of air from the ward through openings meant to serve as inlets only, and the air, after passing the furnaces, was found to be by no means sterile, but, on the contrary, to contain microbes capable of cultivation on agar-gelatine. The draught, too, tended to extinguish the gas jets, and at the Nottingham Hospital bits of cotton-wool and tissue paper were carried through intact. At Bradford, again, the

sterilisation proved to be incomplete, and, although the arrangement of inlets was such as to prevent any reversal of the current in them and leakage of infected air, Dr. Barry very properly takes exception to the precarious character of a system of ventilation which is dependent solely and absolutely upon uninterrupted efficiency of stoking. It is possible that better results may be obtained by the aid of propulsion, or mechanically forcing fresh air into the wards, an excellent example of which—at the Victoria Infirmary, Glasgow—is described in the appendix to the Memorandum; but it seems clear that up to the present time the attempts based upon extraction alone have been attended with such a very modified degree of success as to count as failures in practice.

### GRAVES'S DISEASE AND PERIPHERAL NEURITIS.

In the last number of Brain Mr. Arthur Maude briefly considers this subject, which he first brought forward in a communication to the Medical Society last year. The symptoms on which he grounds the hypothesis that peripheral neuritis is present in Graves's disease are (1) the frequent occurrence of "cramp," to which Dr. Hector Mackenzie first directed attention; (2) hyperæsthesia, which, he says, is nearly always present; (3) symmetrical paresis of the legs; (4) the altered condition of the knee-jerks, which are frequently diminished; (5) varying degrees of numbness, tingling, and pains; and (6) localised cedema, which occasionally occurs in this disease. To account for the neuritis, Mr. Maude supposes that some toxic substance is produced either from the excessive disturbance of the thyroid gland or from alterations in the alimentary canal, and that this toxic substance acts upon the peripheral nerves and gives rise to the symptoms which, he thinks, at least suggest the presence of actual changes in the nerves themselves. Of course it would be idle to exhaustively discuss this hypothesis, which will no doubt at an early date be put to a crucial test by examining the nerves by modern methods; but we would venture to doubt the correctness of the view which Mr. Maude supports.

### THE PORTLAND-TOWN SMALL-POX OUTBREAK.

MR. WYNTER BLYTH has presented a report to the vestry of Marylebone on the prevalence of small-pox which recently affected the region of Portland-town, so far as the month of July is concerned. We assume that the report is only preliminary to a more exhaustive account of the epidemic when the medical officer of health shall have gathered all the facts together; but even so the report is full of interest as showing how the malady was restricted in the area of its operations. There is the more reason for congratulation on this score when we remember that the initial case remained in a shop in a crowded locality for fifteen days, and that of 149 attacks known of by Aug. 8th no less than 139 probably derived their infection from that one case. Mr. Wynter Blyth remarks on the powerlessness of sanitary authorities in the face of a case like this first one, where the patient is in circumstances which are a menace to the public health, but is too ill to be moved to hospital; and he moreover deplores the lack of any power enabling health bodies to offer compensation for trade losses where, as in this instance, the closing of the shop premises might have been productive of much saving of suffering. But he at the same time admits the impracticability of carrying out any scheme of compensation in an equitable manner. With incomplete data as to vaccination in its relation to small-pox, Mr. Wynter Blyth gives only such figures as he himself possesses. These, however, go to show that vaccination has had an appreciable effect on the character of the disease, 4 of the deaths registered up to Aug. 10th having occurred in 65 vaccinated persons (6:1 per cent.),

and 6 in 36 unvaccinated persons (16.7 per cent.). 4 deaths among the vaccinated were all in persons who had been vaccinated at least twenty years. Of the unvaccinated sufferers 21 (58 per cent.) were under seven years of age. The large majority of vaccinated patients were over twenty-one years of age. It will be interesting when the full facts as to the number and character of scars, and the other circumstances in connexion with vaccination and revaccination come to be known to see what has been the actual state of affairs in regard to the influence of these prophylactics. One point to which Mr. Wynter Blyth refers is that in his opinion there is not much danger of infection in the pre-eruptive stages of small-pox. The great lesson of the epidemic to his mind is that, with a combination of the efforts put forth, the disease was kept from spreading over the metropolis, these efforts being the hearty cooperation of the Metropolitan Asylums Board, the speedy removal of patients to hospital, the measures of disinfection practised, the indefatigable labours of the sanitary staff, the hand-inhand action of the sanitary and Poor-law authorities, and last, but not by any means least, vaccination, and especially revaccination.

#### PRETENDING TO BE A MEDICAL MAN.

THE feeling of grievance in the poor who rush to one who poses as a medical practitioner in moments of emergency and afterwards, perhaps after the death of the patient, find that he is not such, is finding expression, and will have to be dealt with. A case has just been investigated by Dr. Wynn Westcott, where the people sent for "Dr. Davis, 190, Greenstreet," thinking he was a properly qualified medical man. It transpired that he had been the unqualified assistant of a practitioner, who, it was stated, had been removed from the register for giving a certificate of death in a case attended by It appeared that there is now no name on the Davis. According to one witness Davis practises largely. The jury expressed great dissatisfaction with Davis's position. The coroner explained that it was not touched by the present state of the law. The foreman said that something ought to be done to stop this sort of thing, and wished the coroner to make the matter known to the authorities-which we trust he will do. His great experience must have brought to his knowledge many such cases; and a communication from him to the Home Secretary, the Registrar-General, and the General Medical Council would do much good. If the principle of the Apothecaries Act were made easily applicable, as we have advocated, such cases would be met; and unqualified men, acting as medical men, would ipso facto make themselves liable to be punished.

## THE ADMINISTRATION OF POISONOUS REMEDIES.

THE unfortunate accident which occurred recently in Guy's Hospital and by which a patient received an overdose of chloral must have resulted in the suggestion of more than one preventive method for future use. Even the most thorough course of instruction cannot, of course, guarantee immunity from the risk of accident. Nevertheless, more might be done than is now usual to so educate nurses as to render the commission of mistakes in dose-giving even more extremely improbable than they are at present. There is no reason why an education in elementary pharmacy, sufficient to ensure their acquaintance with the doses and general actions of all the more usual remedies, and especially of poisons, should not form part of the nurse's curriculum. Ready remedies available as first aids in cases of poisoning would also naturally be included. Thus a nurse would be furnished with a double check upon her liability to accidental error-namely, with that supplie by accurate prescription and by that which would be adde by her own knowledge of correct and customary dosage.