CLINICAL NOTES AND CASES.

Hydrophobic Melancholia. By THOMAS ANDERSON, M.B., Medical Superintendent, Midlothian Asylum, Roslin.

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It is my object in drawing attention to this case to point out that, besides true rabies and false rabies, a third class of cases exists, which owe their origin to similar causes, but have a different termination. They support an explanation of the whole series in accordance with modern theories of nerve action, which the other diseases, taken separately or collectively, do not demonstrate so closely.

While the bite of a dog is nominally the exciting cause in all these cases, they differ principally in their course, and especially in their mode of termination.

In true hydrophobia as it occurs in man, the diagnostic point of the greatest value is the fatal result which attends its development.

In false rabies the symptoms vary much, but speedy recovery is pathognomic of this disease.

The third class of cases connects the two previous disorders, and bears a close relationship to insanity, more particularly melancholia.

By this arrangement I do not mean to assert that an animal poison does not exist in rabies distinguishing it from the other groups, but rather that the poison is a subsidiary phenomenon, since the disease cannot, on extended examination of the symptoms and pathological appearances, be allowed to occupy its usual place, that is, in proximity to glanders and snake poisoning, which it principally does on etiological grounds, from the supposed origin in the inoculation of this poison.

The experiments of Hertroig, Magendie, and Troilet are supposed to have determined the identity of the poison finally; but even admitting such, to come to a true system of treatment we must know its mode of affecting the system.

It certainly does not infect the system as glanders or snake poison, since the blood-vessels and lymphatics are not involved. But the peculiarity of fever poisons in requiring a period of incubation is made to give an explanation of an otherwise inexplicable phenomenon. Fevers, however, have always a definite period of latency, as if the change consisted

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in some physical or chemical transformation, which required a certain time to be accomplished.

It is not possible to apply this theory of blood change to hydrophobia, as the period varies beyond all limits, from a few days to several years.

I incline much more readily to a recent theory which regards this disease as allied to tetanus and infantile convulsions. This has the merit of endeavouring to establish a comparison with diseases to which it has a close resemblance throughout its course, if not indeed in its manner of origin.

It also brings to aid in the explanation of the phenomena, the laws of action and degeneration of the nervous system, and so puts it close to the more familiar form of mental disease witnessed in asylums.

Traumatic tetanus and infantile convulsions can be shown experimentally to depend on external sources of irritation, the removal of the broken glass or the lancing the irritating gum curing the irritation, &c.

A similar mode of treatment is pursued in hydrophobia apparently with good effect. That is by excision of the cut surface of the wound and division of the nerves. While the extent to which the nervous system is involved is very striking;-shooting pain in the part, and along the nerve, hypersesthesia of the eighth nerve and its branches, of the special senses, and often of the whole body. The convulsions, the gloomy terror which shews itself very early by unmistakeable signs, and the irritability and paroxysms of fury, sometimes with delirium, and often with delusions, all tend to stamp it as a disease of the nervous system essentially. While thus claiming for hydrophobia an excentric source of irritation, from whatever cause, centric changes must have preceded, which of themselves render it capable of acting in a reflex manner; for the inequality of the development of rabies is regulated by the presence of depressing emotions and enfeebling bodily conditions.

When, therefore, centric changes are so closely associated with this disease, the conclusion is obvious that they may without any such cause occur primarily, and so resemble in a greater or less degree cases of idiopathic tetanus.

In analysing cases of rabies true and false, it requires to be noted specially that the symptoms are not always the same, groups of organs being more affected in one case than another; this being itself a strong argument in favour of centric degeneration. In the dog the changes are almost entirely mental; in man, the difficulty of swallowing, or hyperæsthesia of the nerves of the throat, is most marked, exciting the paroxysms. The special senses and skin are, however, often equally and sometimes more sensitive, while in all cases the mental changes vary much. This is specially the case in false rabies.

Chomel gives cases of physicians who found difficulty in swallowing after dissecting patients who died of hydrophobia. Trousseau also gives many interesting cases, and Tuke, in his "Influence of Mind on Body," gives a remarkable series of cases, illustrating in a very lucid manner the action of the ideational centres on the sensori-motor. Chomel regards all the cases of old standing as idiopathic. Pinel records a case of pure idiopathic hydrophobia in a soldier, in whom no evidence of bite could be ascertained; and Copland refers to other cases of a similar kind, though he thinks little of such cases. Healthy dogs have sometimes given rise to hydro-phobia which proved fatal. This makes it obvious that the explanation of this group of diseases can be most successfully attempted in accordance with the modern doctrines of the action of the nervous system. The further elucidation of this idea will be taken up after reading the details of this case.

JEMIMA S-, labourer, single, admitted 25th November, 1873, aged 35 years.

Previous History.—Her family history is healthy, with the exception that her father is somewhat drunken in his habits. She enjoyed good health up to about 11 years ago, when the birth of an illegitimate child caused a shock to her nervous system, from which she has never completely rallied.

About three years ago she received a second severe fright, owing to her child, to whom she was very fondly attached, having fallen and sustained an extensive wound which denuded his skull of a large portion of the scalp.

After this she had attacks of restlessness, and was at times unable to sleep, and these were worst in the spring of each year. But they were of a temporary character, and did not alarm her relatives as to her mental soundness.

On the 3rd August, 1873, she happened to approach near a dog of a ferocious disposition, used as a watch dog. It was on the chain. It attacked her, and inflicted a wound $1\frac{1}{4}$ inches in length on the right hip. This caused much alarm in her mind at the time from the known ferocity of the animal, and people told her that August was one of the worst months to get bitten in. The wound healed slowly by suppuration, and it was only at the end of a month that she was able to walk about. She states that she still felt lame. She again attempted to resume her employment, but was unable to do so.

She could not fix her mind on any definite pursuit. She became very low spirited, and could not sleep. The thought that no caustic or incision had been employed on the bite preyed on her mind. This gradually became more deeply impressed on her. She became convinced that she could not live. The idea was present in her mind always that she was to die. She became more unmanageable from violent paroxysms, and a tendency to suicide, and was brought to the asylum on the 25th November, 1873.

State on Admission.—The general condition of the body is thin and emaciated. There is a slight scar, one inch in length, on the right hip. The skin is harsh and dry. Common sensation, as well as that of pain, is much impaired. She permits herself to be pinched without evincing any feeling of pain, and states that she thinks she could allow her legs to be cut off.

She lies at present in bed. Her eyes are closed. The conjunctivæ are suffused, as if she had been weeping. The brows are knit. The facial muscles of expression are relaxed. The face and lips are pale, and the aspect is one of extreme fear. She answers questions readily, maintains that she is not insane, and evinces considerable intelligence. She maintains that her trouble is incurable, and that she would like to die. That the entire cause of her illness was the bite of the dog. Her terror is increased if she sees a dog, and she abstains from food, and refuses to be bathed; the idea of a bath causes her much pain. She complains of pain in the vertex and neck, and grasps her neck occasionally with both hands, trying to strangle herself. If left alone she gets out of bed, and hides in some recess, and twists portions of her sheet round her neck, and resorts to other practices if possible to injure herself. She has paroxysms of extreme fury, in which she gets out of bed and rushes about, requiring several attendants to keep her in order.

She refuses food. The tongue is furred. The bowels are costive. The pulse 76 in the minute, and very weak. The respirations 20 in the minute. The temperature 97°. Catamenia absent. The other systems are normal.

After the two first days no difficulty was experienced in causing her to swallow her food. The treatment pursued was rest in bed, nutriments and stimulants, and the avoidance of all sources of excitement.

The wound was cauterised, more, if possible, to allay her dread than effect anything else, and this gave her mind considerable relief. She still, however, manifested a strong suicidal tendency and furious outbursts of restlessness and emotional excitement, requiring the presence of several attendants by her bedside constantly. It was then determined to put her under the influence of hydrate of chloral, which was given three times daily after food, combined with a small quantity of morphia. This acted very well, and produced sleep between meals. She was generally able to wake up when her food arrived, and after it was taken, it served the double purpose of producing sleep and strengthening the system against the depressing effects of the chloral. This was pursued for a week with great benefit.

The subsequent history of the case may be told in a few words.

She remained in bed for about three months. She took her food well, and slept the greater portion of her time. Her nervous apprehensions gradually became dissipated, though she had monthly exacerbations of the attack. In these a prominent symptom was that she would start up out of her sleep, imagining that the dog was attacking her, and this idea could not be got rid of for some time. She still remains in the house. Menstruation has been established. She is free from her former apprehensions, and is gradually improving in tone of mind and bodily energy.

From whatever point of view the above case be regarded, when compared with other cases, the dependence and connection of the nervous symptoms on physical states is worthy of attention. We have a system predisposed by heredity, and previously prepared by a succession of severe mental shocks.

The bite of a dog and the dread of hydrophobia end, not as in false rabies by the cessation of the symptoms only, but proceed to actual mental disease, which in its early stages presents symptoms so close to true rabies in man, that they can be distinguished with difficulty. The difference between them is indeed so small that the theory of centric origin in all cases is far from improbable. The exacerbations connected with the menstrual nisus, and the recurrence of the imaginary attacks of the dog at these periods, are interesting when we consider that the emotional conditions connected with the sexual system sustained a shock previously.

How far it may be assisted by any external irritation is a matter of speculation only.

But before finishing these remarks, I wish for a moment to draw attention to the close approximation which we find in many forms of disease to the symptoms of rabies, or groups of them in different stages of development, in order that explanation of the phenomena may be attempted on the laws of nervous action rather than upon obscure and ill-defined theories of latency and blood poison.

In hysteria a difficulty of swallowing and spasmodic affections of the neck are frequent. A dread of water occurs as a symptom in insanity, especially in melancholia, and is often met with in asylums. They refuse to take the usual baths, and do so from a distinct horror of water.

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But that period of the disease in which mental aberration is established is particularly interesting when taken in connection with cases which must owe their origin to disease of the same centres.

The irritability is one of the most constant of the symptoms, and also the extreme fear; but when delusions present themselves the patient acts as if he were a dog, or imagines that he is struggling and contending with dogs or wolves. We have here a condition which, from the part of the nervous system diseased, is akin to cases which occur sometimes nowa-days in asylums. Brierre de Boismont, in his treatise on the hallucinations, relates a case of this kind, and refers to one in which a patient died struggling with an imaginary wolf.

Lycanthropy is closely connected with this state. Dr. W. A. F. Browne records in the 9th Annual Report of the Crichton Royal Institution a case of this kind, where a girl stating that a mad dog had bitten her, came to record herself as a dog, and to bark and howl like one. The transformation of gods and men into imaginary animals is a common circumstance in classic lore. Jupiter changed himself into a bull; Actæon became a stag; Hecuba a bitch; the comrades of Ulysses swine. The pasture lands and woods of Arcadia were the chief seat of Lycanthropy, and half the world still believes in the weir-wolves of the Scandinavian forests.

The epidemics of Lycanthropia which occurred in the middle ages may be referred to the same class of cases. They are all closely allied, and consist in centric disease of certain portions of the Encephalon, which takes its origin from external irritation, as in rabies, connected with depressing mental emotions, as in false rabies. It may, again, lead to true insanity, as in the case before us, or this condition, arising from any of the above sources, may become epidemic, as in lycanthropia, as previously alluded to.

On the use of Veratrum Viride in certain forms of Insanity. By Dr. HILLS, Medical Superintendent Norfolk County Asylum.

Hellebore is a remedy of great antiquity, and Hippocrates was evidently aware of its sedative properties, for in his aphorisms, he says: "When anyone has drunk hellebore, he must have recourse to movement rather than to quiescence and sleep."