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A Post-Graduate Lecture

ON

SOME CLINICAL ASPECTS OF PAIN.

ESPECIALLY IN REFERENCE TO ITS
SPONTANEOUS DISAPPEARANCE.

DELIVERED AT THE LONDON SCHOOL OF CLINICAL
MEDICINE (SEAMEN'S HOSPITAL).

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THE disappearance of pain is naturally as a rule assumed to be a favourable symptom, and in the majority of cases the assumption is a right one. That it may, however, sometimes be an unfavourable indication, and indeed may mean impending disaster, seems to be hardly sufficiently realized. This must be my apology, therefore, for devoting the time at our disposal this afternoon to some consideration of the question.

GENERAL CONSIDERATIONS WITH REFERENCE TO PAIN.

Before dealing with the special point I have in view, it will be convenient to refer to certain general considerations. The point of primary importance in adequately gauging the value of pain is a proper estimation of the temperament of the patient. Some people are much more susceptible to pain than are others, and inability to bear pain should not, as is sometimes done, be ascribed to cowardice. Since it is in most cases due merely to a physiological peculiarity, it varies greatly in different people, and in the people of different nations. For example, coloured races are notoriously more indifferent to pain than are those inhabiting this part of the globe. Some years ago a porter at St. George's Hospital was under my care on account of malignant naso-pharyngeal polypus, and I removed on separate occasions first one upper jaw and then the other. For neither operation would he submit to the administration of an anaesthetic, and during each he remained perfectly quiet, sitting in a chair, the arms of which he firmly grasped, and on each occasion he was well enough when the operation was completed to thank me for what I had done. Now, that, under ordinary circumstances, would be looked upon as an astonishing exhibition of bravery, and so undoubtedly it was; at the same time, it is impossible to believe that a man who could endure such pain in such a way could be as susceptible as some other people are. I have known, for an example, an officer, whose bravery in the field was beyond dispute, howl loudly during a by no means forcible endeavour to bend a partially stiff joint. It would be ridiculous to attribute cowardice to a man of that type, but he happened to be of that so-called highly-strung nervous temperament which seems to be quite unable to control itself under pain inflicted in what is commonly called "cold blood." A man of that type, on the other hand, in an emergency may bear himself with fortitude of the highest kind. As a matter of fact, this particular individual was notorious for his recklessness in all matters connected with war and its happenings.

These two cases should be sufficient to show what an enormous difference there may be in different individuals in this matter; and it would of course, therefore, be quite impossible to consider properly the question of the behaviour

of pain as a clinical symptom unless the influence which the temperament of the individual has upon the process be fully realized. Because it is obvious that what to a person who is comparatively insusceptible to pain would appear to be complete disappearance, in the case of an individual of high susceptibility would be merely diminution. It must therefore be recognized, as a matter of fact, that the intensity of pain felt by the individual is, relatively, largely dependent upon the psychic resistance. In determining, therefore, the value of pain or its disappearance as a symptom, a careful estimate, as I have said before, of the patient's temperament is essential. "I fear I am causing great pain," said a French surgeon, who whilst amputating a limb in the pre-anaesthetic times noticed an expression of great distress upon the patient's face. "No," was the reply, "the pain is nothing, but the noise of the saw sets my teeth on edge."

It must be understood that pain, speaking generally, is a secondary consequence, excepting in certain psychic conditions, in which it may be said, for clinical purposes, to be the primary factor. Hence pain indicates a primary cause, and spontaneous change in pain must mean an alteration in the condition of its cause, facts almost too obvious for comment, but conveniently mentioned for the purposes of emphasis in certain points that follow. Pain, excepting in purely physiological, that is psychic, cases, is in fact associated with some other condition or symptoms which must also be concerned in its disappearance. The seat of the pain may, however, be remote from the cause to which it is due. For example, acute pain at the inner side of the ankle may originate in a malignant growth occupying Scarpa's triangle.

RELATION OF PAIN TO TENDERNESS.

Pain may, of course, be entirely unassociated with tenderness; but the absence of tenderness over the painful area does not exclude the possibility of its being present elsewhere, for example, the acute pain about the pit of the stomach in some diseases of the spinal column (say malignant disease) may be associated with tenderness over the primary lesion. In all cases, therefore, a search for tenderness should be made along the line of distribution of the nerves concerned, an obvious indication, but one not too commonly observed. Tenderness over the painful area is of three kinds. In the first variety the pain is increased by pressure of any kind. In the second it is increased by deep pressure only. In the third variety the pain is increased by superficial pressure, and diminished by deep pressure. Extreme cutaneous hyperaesthesia may be regarded as of two kinds: (1) That which is relieved entirely by pressure of the right kind, and is generally a psychic condition; (2) that which is increased by pressure, in which case it is a clear indication of subjacent organic trouble.

A proper appreciation of these points is of importance, especially with reference to treatment, assuming that the pressure used in the examination has been intelligently applied.

Clinical Example 1.—A patient, probably a woman, complains of pain of rather rapid onset in the calf of the leg, together with the feeling of tightness and weight in the limb, which to the touch seems full and hard. There is little or no tenderness on gentle pressure over the most painful region, but deep pressure causes pain, which increases with the degree of pressure. In such circumstances phlebitis, or at all events some deep inflammatory condition is present, and rest is indicated, massage being excluded as a harmful measure.

On the other hand, gentle pressure may cause considerable pain, which upon increasing the pressure is diminished or entirely disappears; the condition existing in these circumstances, which is often mistaken for phlebitis, and is sometimes said to be gouty, is a neurosis leading to vasomotor dilatation and engorgement especially in the muscles, a condition in which rest is not necessary and in which massage is the principal means of cure—the differentiation in the two cases being practically dependent upon the behaviour of the pain under pressure.

PAIN IN RELATION TO TEMPERATURE AND PULSE.

Pain of the most acute kind may not of course be associated with any rise of temperature. In fact, in the absence of inflammation, sepsis, or certain specific infections, there is no essential connexion between pain and fever. With regard to the pulse the matter is different. Acute pain, unless purely psychic, is under ordinary circumstances always associated with an increased pulse-rate; the volume or tension varying according to the cause of the pain. Chronic or subacute pain is not necessarily associated with alteration in the pulse, but would of course be so if its cause were of a kind which would affect the heart's action.

THE EFFECT OF PAIN UPON THE GENERAL CONDITION OF THE INDIVIDUAL.

Speaking generally, the constitutional effect of pain is mainly dependent upon the amount of fever coexisting, and to the exhausting character of the disease to which it is due. Pain as an independent factor is at times singularly free from constitutional effects, a fact which receives perhaps the most forcible illustration from some cases of trigeminal neuralgia, the pain of which is probably as bad as any type of pain can be, yet the patients so afflicted may remain well nourished and apparently robust in spite of their suffering.

THE SPONTANEOUS DISAPPEARANCE OF PAIN.

Having regard to what has gone before, pain must be considered for clinical purposes merely as a single factor in what may be a very complicated association. It is therefore obvious that any change in the character of the pain, especially its spontaneous disappearance, must, if it is a change towards normality, be associated with corresponding changes in the other factors of the association. In other words, in any given case, if the change in the nature or character of the pain be out of proportion to changes in the associated factors, the change is not always favourable, and should be regarded with suspicion. The predominance of pain as a cause of suffering is very apt to lead a patient, quite naturally, to think that the mere disappearance of it must be a symptom of approaching recovery. That this may not always be so is not, so far as my experience goes, sufficiently realized even now by some medical practitioners.

SPONTANEOUS DISAPPEARANCE OF ACUTE PAIN.

Setting aside cases in which the pain is relieved by the disengagement of a foreign body from a mucous channel—for example, the passage of a gall stone—or by the cessation of cramp as in colic, the spontaneous disappearance of acute pain may be set down either to relief of tension—for example, by the bursting of a cavity or the very rapid absorption of effused products, the occurrence of hæmorrhage, etc.—or to the superintention of septic intoxication leading to indifference; the latter cause being the most interesting from a clinical standpoint, because of its great tendency to deceive, especially in young people, in whom the indifference resulting from septicaemia comes on more rapidly than in adults. It is therefore necessary, in the first instance, to have in mind two factors concerning the disappearance of acute pain: the actual relief of pain by a change in the lesion to which it is due, and a condition of mental torpor induced by septicaemia which leads to absolute indifference and contentment of a most deceptive kind, which if not realized may lead to very grave results. The examples of this latter condition occur most commonly in abdominal work, although they are not confined to it. The following cases of appendicitis, although of a familiar type to most of us, may be usefully compared, as they afford capital opportunities for emphasizing the point.

Clinical Example 2.—A youth of 17 years of age suffered in the course of two years from several attacks of appendicitis of a very acute type. The onset of the attacks was always very sudden, and he usually recovered completely in a fortnight or thereabouts. When I saw him shortly after the commencement

of his fifth attack he was suffering acute pain, his temperature was 101°, the whole belly was rigid, the cutaneous hyperaesthesia and tenderness over the usual area were very acute, the tongue was thickly furred, the pulse was 120, and the face was flushed. At the end of twenty-four hours all pain very rapidly subsided. With the subsidence of the abdominal pain the pulse-rate declined in the same way, the rigidity and tenderness pursued the same course, the flushing of the face disappeared. Within four days the temperature was normal, and the tongue was as clean as a tongue could reasonably be. An action of the bowels had occurred spontaneously at the end of the second day, and for practical purposes recovery was complete at the end of a week, when he was allowed to get up and go about his usual business.

Clinical Example 3.—A man, aged 22, had a precisely similar history to that in the last case. I saw him shortly after the commencement of his sixth or seventh attack. His condition appeared to be identical with that of the previous patient. In the same way, about thirty-six hours after the onset of the attack his pain rapidly disappeared, and he pronounced himself as feeling nearly well. But his aspect had not changed materially; his pulse was still quick, the rate being much the same as it was before the disappearance of the pain; and the temperature, which had previously been 101°, dropped immediately to normal, but rose again within a few hours. Nevertheless, he declared himself perfectly well, was hungry, and lay in bed reading a book.

Now, so far as the general comfort was concerned, and so far as the disappearance of the pain was concerned, these two patients at the end of the first two days were from their own points of view equally well. It will, however, be noted that there was just this difference between the two cases: in the first there was a coincident subsidence of all the symptoms, whereas in the second case the only symptom which had shown any real sign of improvement was the pain, with the exception of the cutaneous hyperaesthesia, which, although present to some extent, had very greatly diminished. It was obvious to anybody possessed of experience of this kind, that in the second case an operation was urgently necessary; and it was equally obvious in the first case that no operation was immediately required. In other words, in the first case recovery was certain; in the second disaster was sure, because the loss of pain in the second instance was not due to a change in the local conditions which produced relief of tension, but was due to the indifference of septic intoxication which arose from gangrenous changes which had occurred in the affected appendix. The first was a catarrhal case in which the appendix from time to time got greatly distended—that this was so was proved subsequently by an operation done during the quiet period—and was an example of the cure of pain by the relief of tension, with the accompanying subsidence of all the other factors of the association which I referred to just now. The second case, on the other hand, was one of the septic cases producing the indifference which we have also spoken of. And it is quite clear that if in the second case that really very obvious point had not been recognized, the patient must have died within a day or two.

Clinical Example 4.—In this case the part concerned was the gall bladder, and it illustrates a rather different aspect of the matter. The patient was a woman of 46, who for years had suffered occasionally from gall-stone colic, from which she had recovered in the ordinary way. The pain had always ceased abruptly, as it generally does in cases of that kind, her other symptoms—high temperature and general distress—ceased or diminished coincidentally, and she was soon well and about again. Finally, she had an attack which seemed to be somewhat more severe than usual. She was seen after the pain, of the usual gall-stone colic type, was just on the decrease. An operation was advised, but for reasons which were sufficient was not performed at that moment, a postponement of forty-eight hours having been insisted on by the patient. In the interval the pain rapidly ceased in the way it had usually done before, and she was under the impression, and so were those about her, that the case was ending in the ordinary way, and that she would be about again in a day or two. I only saw her subsequently because it had been arranged that I should do so and not because it was thought really necessary under the circumstances that I should see her again. However, it was fortunate that I did so, because I found her in a condition which, to me, was a very grave one. She was quite free from pain, and declared herself to be exactly in the condition she had been on previous occasions when she was recovering from her attacks. But her face was a little inclined to be yellow, her tongue was foul, her pulse was quick, and her temperature was gradually rising. This appeared to me to be an association of symptoms quite incompatible with the mere relief of pain by the passage of a gall stone down the duct in the ordinary way. Therefore, somewhat to the dismay of the family generally, I strongly urged immediate operation as being even more necessary than it had been previously when I was anxious to perform it, and should have done so had it not been deferred for some family reason.

It was with some difficulty that I could induce those concerned to see the desirability of interference, but I succeeded at last in doing so. Upon operating, we found that the gall bladder, which was a good deal matted to the parts around, showed an ulceration which opened into an abscess, which again opened into the large intestine.

The relief of pain, as a matter of fact, was due not to escape of a gall stone down the duct, but to the bursting of an abscess into the intestine, and the immediate diminution or disappearance of pain was mainly due to the relief of tension which the opening into the bowel of course afforded. In the same way as in the other cases, it is obvious that had we been deceived by the mere disappearance of the pain, that woman would probably have died. Hers was a case in which mental indifference, the result of blood-poisoning, was associated with an actual change in the local condition.

As I said just now, these cases are not confined to the abdomen.

Clinical Example 5.—A girl of 15 had for some nine months been the subject of hip disease of a rather acute and distressing kind, with much pain, of a more acute type than is common with hip disease of this sort. She had been carefully treated during the whole time, and had apparently commenced to make a little improvement. Nevertheless, the pain was frequently very acute. Her temperature was sometimes rather high—100 to 102°—although there was no objective evidence of any suppuration about the joint. At the same time, on several occasions when the temperature reached the highest level, proposals were made to open the joint, but they were received with too much opposition to allow the treatment to be carried out, as a favourable result could not be guaranteed. So the question of operation was allowed to pass. She was a delicate girl, always very flushed in the face, with a furred tongue, and with very unwholesome breath. I had arranged to see her on a certain occasion, when I received a note on the day previous saying that her parents were happy to say it would not be necessary, as she was so much better, the pain having entirely ceased, her condition being better than they had seen it during the last six months, which, so far, appeared to be satisfactory. However, as she did not appear to be progressing quite as well as was expected, in spite of the disappearance of the pain, I saw her three days later, and found that certainly the pain had disappeared, a general feeling of uneasiness being present and nothing more. But her temperature was still high, and instead of the bright flushed look that she had before, the face was dusky, and her tongue, instead of cleaning, as it should have done, was covered with a brownish fur. It was quite clear here that a septic change had taken place, and that she was in the indifferent mental condition of septicaemia. And further, upon examining the hip it was found that there was a change in the local conditions. As a matter of fact, the head of the bone, or what represented the head of the bone, had left the acetabulum, and there had been an upward dislocation of the femur; another case which illustrates the very deceptive character that the disappearance of pain may give to a case.

Now, in neither of the cases which we have mentioned, it must be noted, was there improvement beyond the loss of pain, with the exception of the second case, the gangrenous appendix case, in which the loss of tenderness was due to the same cause as the loss of the pain, that is, indifference from septic intoxication. In all of these the temperature remained high. That is not always the case.

Clinical Example 6.—A woman, aged 58, had a large ischio-rectal abscess, incision of which was delayed for a day as the patient declined operation earlier. The case was an ordinary one, with no special symptoms. The pain was acute, the tenderness great, the whole ischio-rectal region was swollen and brawny. During the night the pain and tenderness disappeared, and much satisfaction was expressed at the condition of things. When seen the following day she was perfectly comfortable, reading the daily paper—in bed, of course—the temperature was only 96.5° (it had been 103° on the previous day), the skin was sweating slightly, the pulse was 120, the tongue was thickly coated, and the breath disagreeable; no change in the local condition was perceptible. After some difficulty, incision was consented to, and a slough of the whole ischio-rectal tissue was removed. The patient subsequently succumbed, without warning, to pulmonary embolism.

In reference to the low temperature in this case, it must be borne in mind that it was a common experience in the days when gangrenous processes were more common than they are now to find in cases of cellulitis, cellulocutaneous erysipelas, etc., that a sudden drop of temperature to a low point generally meant impending gangrene. In these days, when we have less experience of acute processes of that kind, some of these symptoms, which were of such importance in the older time, have come to be forgotten. But it is of advantage to have them brought back to memory, as, in spite of cases of gangrene of this type being rare in these days, the know-

ledge of symptoms of the kind mentioned may sometimes prove of value, and may, indeed, in some cases be the means of saving life.

SPONTANEOUS DISAPPEARANCE OF CHRONIC PAIN.

Speaking generally, as in the case of acute pain, sudden or rapid disappearance of chronic pain should excite suspicion, whilst its gradual subsidence may be, as a rule, regarded as salutary, provided, of course, that it is associated with amelioration of any other concurrent condition which may exist. The cause of rapid or sudden subsidence is usually abrupt relief of tension, which, excepting of course in superficial conditions in which the result is an escape of contents externally—as, for example, in the bursting of a chronic abscess—as a rule indicates a more gross change in the local condition than is compatible with genuine improvement.

Clinical Example 7.—A man, aged 52, who had contracted syphilis in his younger days, had for more than a year suffered from continual aching pain at the inner side and immediately below the knee. He had been treated by antisyphilitic measures with a varying amount of success. No constitutional disturbance had been noticed. Moderate exercise did not affect the pain; there was neither perceptible swelling, increase of heat, nor other symptoms, excepting slight tenderness on very deep pressure over the head of the tibia. The knee-joint was normal. A month after coming under my observation considerable increase in the pain occurred, so that it was almost intolerable. The patient was not seen at this period as he was out of reach. A week later, during an attack more acute than ever, the pain very rapidly disappeared, leaving merely a slightly bruised feeling about the parts. When seen after this change he was walking well and quite content with his condition. Upon examining the affected region, at first sight nothing abnormal could be detected, but on careful investigation the lower part of the popliteal space seemed to be more full than on the opposite side. The lesion proved to be an endosteal sarcoma of the head of the tibia, which had made its way, rapidly at last, through the back of the bone, and so the relief of pain was accounted for.

Clinical Example 8.—A man, approaching 40 years of age, whom I had known for some time professionally, suffered constantly from headache about the occipital region; it was rarely absent although at times it was very slight. When the pain was very acute the facial aspect was a little heavy, the pulse never more than 88 to 96; there was no elevation of temperature; but slight mental irritability was always present. After the subsidence of the acute attacks a quiet sleep sometimes followed, the pulse ranging from 65 to 70. Finally, after a week of rather more trying headache than usual, the pain rapidly subsided, and in a few hours entirely disappeared, to his intense satisfaction. Before arranging to set about some business which had been postponed on account of the recent exacerbation of pain, he came to see me. Instead of an aspect of anxiety and of sickness he had a look of contentment, the temperature was normal, but the pulse was very slow, only 48 in the minute and compressible. Regarding his condition on this account as very suspicious of great trouble, I with great difficulty induced him to cancel some immediate arrangements and return home. It was fortunate he did so as in twelve hours he was dead, the cause of death having been due apparently to the softening and rapid increase of a tuberculous mass in the posterior cerebral lobe, of which no sign or symptom of any kind existed before death excepting the pain.

With the exception of the rapid cessation of pain, the only irregular symptom here was the slowing down of the pulse to forty-eight beats in the minute, which, however, was quite enough to act as a danger signal. The misinterpretation of a case like this would obviously not be difficult.

SHIFTING PAIN.

Under ordinary circumstances pain which "moves from place to place," that is to say, which disappears from one spot and immediately makes its appearance in another situation, is not of serious importance, if chronic or sub-acute, in the absence of ulceration or other obvious causes of septic infection, but acute pains of this type occurring in joints with effusion are of considerable importance, since although frequently ascribed to rheumatism or gout, they are much more frequently due to septic infection from the intestinal canal, and can only be successfully treated by attacking the cause. Moreover, it must not be forgotten that in pyaemia, with especially high fever, the sudden disappearance of pain from a secondary focus (say in a joint) without marked diminution of temperature is almost invariably followed by further deposit elsewhere, a point of some importance, as the further deposit may occur in some internal organ, for example, lung, liver, brain, etc., and so may show no immediate objective sign of its existence.

CONCLUSIONS.

The spontaneous modification or disappearance of pain is so large a subject that a lecture like this can hardly be made to contain more than a suggestion of its importance. What I have said, however, I hope will be sufficient to emphasize the three following cardinal points necessary to be borne in mind in its consideration:

1. No accurate estimate of the behaviour of pain is possible in the absence of a careful study of the temperament of the patient.

2. Sudden or rapid disappearance of pain should never be accepted without reserve on its own account as a sign of improvement.

3. Sudden disappearance or rapid diminution of pain, unless it be coincident with proportionate improvement in the associated symptoms, is often a sign of impending disaster, and not an indication of recovery.

An Address

ON

THE SO-CALLED FAMILY DISEASES:

PREMATURE PHYSIOLOGICAL SENESCENCE
LOCALIZED TO CERTAIN ORGANIC
SYSTEMS.

DELIVERED BEFORE THE ROYAL COLLEGE OF PHYSICIANS
OF LONDON ON JUNE 22ND, 1908,

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MR. PRESIDENT AND GENTLEMEN,—On February 18th last, in the name of the University of London, Sir Dyce Duckworth, President of the English Section of the Entente Cordiale Médicale, speaking in excellent French, gave in the large theatre of the Faculty of Medicine of the University of Paris a remarkable lecture on Diatheses and the Personal Factor in Disease.

No one was better qualified than the eminent physician of St. Bartholomew's for the task of expounding the traditional doctrines which the great clinicians of the past have built up bit by bit from the patient observation of the sick; and it was all the more necessary seeing that many physicians, in view of the marvellous discoveries of bacteriology, physiology, normal and morbid histology, etc., have thought, and still think, that nothing, or next to nothing, remains of the teachings of the past. They would fain have us believe that up to the time of these discoveries we had been living on mere words, on conventionalities, on systems that have crumbled to pieces one after the other. It was fitting that the author of classical works on gout—pre-eminently a constitutional disease—should put things in their proper place, and show that in every disease the *personal* factor has a prevailing influence, and that, beside the *germ*, we must take into account the *soil* in which it grows. Your distinguished countryman, with his great clinical sense, laid proper stress on this important fact. His success was great and justified.

To-day I, in my turn, have the honour of addressing you as President of the French Section of the "Entente Cordiale Médicale." This is really a return visit which the University of Paris is happy to pay to her sister, the University of London, and in her name I thank you for your warm welcome.

I must in the first place excuse myself for speaking in French, but my knowledge of your language is so imperfect that I dare not venture to lecture in English.

You would certainly be surprised were I not to select my subject from that special branch of medicine which has always engaged more particularly my attention, but it has occurred to me that I might interest you more by taking from the immense field of neurology a general subject which all physicians, whether specialized or not, should be familiar with and which—in my opinion at least—rises high above all other subjects. I refer to the so-called *family diseases of the nervous system*, and to the *part played by heredity in those diseases*.

The so-called family diseases are most interesting. They form a class of very peculiar maladies, a nosological group as important from its particular characters as from the considerable development it is deservedly attaining in pathology. Whether you consider their anatomy or their pathological physiology, their symptoms or their course, they stand out with such strong and personal features that they cannot be mistaken for any other disease. No trauma, no infection, no intoxication, no diathesis gives rise to them. From beginning to end they follow an inevitable course, as inevitable as the "Fatum" of the Ancients. To become the victims of these diseases the subjects need only be born of the same parents and reach the age marked out by Fate. Family diseases, unlike so many others, are not the expression of a struggle waged by the system against a morbid agent (and the word "struggle" implies possible victory)—they are the consequence of the original constitution of certain nerve tracts or cells, and so they have sometimes been called "evolution diseases." As a matter of fact, they can hardly be termed "diseases," for they are really *organic types abnormal from their very origin*.

I purposely say "family diseases" and not "hereditary diseases." The latter term includes too many complaints, and, moreover, pathological heredity is one with normal heredity; it is present in all sick persons—I was about to say in all men. We all know its enormous influence on the development of nervous diseases; its characteristic feature is its great dissimilarity. Moreover, an efficient morbid cause is always found working with it. Not so with the family diseases; they are exclusively created by the parents, by the ancestors, and they develop quite apart from any external influence.

Clinically, it is easy to realize the absence of any external influence when we see several brothers and sisters who have lived in widely different conditions developing at the same age the same disease, and one having as its fundamental characters that it is inevitable and progressive, and due to pathological changes which are not those of defence or inflammation.

Are these diseases always, strictly speaking, "family diseases"? That is to say, are they always repeated in several members of the same family? By no means. They are often met with as isolated cases, and it is by their own symptoms that they can be recognized.

Another general remark which must not be overlooked in connexion with these diseases is that the different clinical types which constitute them are not found to be identically the same in all cases. It seems as if each family had its own way of working out the same family disease, just as if the fact of developing in different families caused each morbid type to receive a somewhat different stamp. And thus it is that the classification of family nervous diseases is difficult. Every year, as it were, new diseases spring into existence, because authors describe too often as a special disease what is in reality a peculiar form of disease already well recognized.

In this respect nothing could be more instructive than the way in which were constituted certain morbid types of diseases, whether family diseases or not.

See, for example, what has taken place for *progressive muscular atrophy*. When for the first time this disease was described as a distinct nosological entity by Duchenne of Boulogne more than fifty years ago, this great observer described under that one name several diseases which have but one common feature—namely, slow and progressive wasting of the striate muscles. A first distinction was introduced between the primitive disease and those forms with contracture, paresis, sensory disturbances, exaggerated reflexes, etc. At the same time another separation was being achieved which led to the recognition of several varieties of muscular atrophy characterized by their inception at an early age, and by their development in several members of the same family. Thus it seemed that nothing would remain of Duchenne's primitive type. As a matter of fact this type does exist, but it is, comparatively speaking, scarce. It is a variety of progressive muscular atrophy, the "myelopathic" variety, an individual disease, characterized by slow and progressive disappearance of the large cells of the ventral horns.

To this type another form has been opposed—namely, the "myopathic" type, a family disease characterized by