observe in progressive muscular atrophy, or a very marked decrease of faradic electricity, ought to make us suppose not only that the lateral columns are profoundly injured, but, also, that the anterior cornua of the gray substance have been invaded. I have not observed, up to the present, these latter symptoms except in cases of hysterical contracture of very old standing, and which left but little hope of ever again seeing the affected members resume their normal functions.

I will add, in conclusion, that the existence of a spinal organic lesion, of more or less gravity, will be placed almost beyond doubt if, under the influence of sleep induced by chloroform, rigidity of the members only gives way slowly, or even persists to any marked extent.

In my opinion, so long as these symptoms are not distinctly manifested, we should despair of nothing. It is besides important not to forget that *lateral sclerosis*, even when completely established, is far from being an incurable disorder, as I hope soon to prove to you.

In the case of the patients to whom I have called your attention, the contracture occupied either the whole of one member or of two members, or even more. But there are cases in which spasmodic rigidity remains limited to some portion of a member, as the foot for instance, when it produces a sort of *hysterical club-foot* (*talipedal distortions*, of M. Laycock). Quite recently, Dr. R. Boddaert communicated to the Medical Society of Ghent a most interesting case of this kind.[1] The contracture had occasioned the deformity, known as talipes varus. Similar cases have been collected and published by Dr. Little,[2] by C. Bell,[3] by Dr. F. C. Skey,[4] and by some other authors.

If it were not for certain reasons of propriety, I could, in my turn, gentlemen, relate in all its details the history of a case which resembles that published by M. Boddaert.

Let it suffice to inform you that a young girl, at present twenty-two years of age, very nervous, and belonging to a family in which nervous affections predominate, was, three years ago, suddenly seized with painful contracture of the muscles of the left leg; it could be assigned to no cause, and she had not previously shown any characteristic symptom of hysteria. This contracture, which made the foot assume the attitude of most marked talipes equino-varus, gave way to several remissions in the course of the first year, but during nearly two years it has remained stationary and seems permanent (June, 1870).

[1] 'Annales de la Société de Médecine de Gand,' 1859, p. 93.

[2] A 'Treatise on the Nature and Treatment of Club Foot and Analogous Distortions,' London, 1839, Case 35.

[3] 'The Nervous System of the Human Body,' 3d Edition, 1836, Case 177.

[4] 'Hysteria, etc.: Six Lectures Delivered to the Students of St. Bartholomew's Hospital,' 1866, 3d Edition, London, 1870, p. 102.

Several of the muscles of the leg have become greatly atrophied; they likewise present very marked fibrillary contractions, and respond but feebly to electrical excitation. Hence, I believe that there is little chance of seeing the contracture become resolved, more especially as it shows but very imperfect amendment during sleep, induced by chloroform. I will also point out a most interesting peculiarity, from a clinical point of view: this young girl has experienced hysterical seizures in the course of the last few months only.

LECTURE XIII.

HYSTERO EPILEPSY.

SUMMARY.—Hystero-epilepsy. Meaning of this term. Opinions of authors. Epileptiform hysteria; hysteria with mixed crises. Varieties of hystero-epilepsy; hystero-epilepsy with distinct crises; hystero-epilepsy with combined crises, or attaques-accés (seizure-fits). Differences and analogies between epilepsy and hystero-epilepsy. Diagnostic signs supplied by examination of central temperature in hystero-epileptic acme, and in epileptic acme. Epileptic acme; its phases. Clinical characters of hystero-epileptic acme. Gravity of certain exceptional cases of hystero-epilepsy. Case recorded by Wunderlich.

GENTLEMEN,—In the brief clinical description which I gave you, in reference to each of the patients who had passed under your observation at our recent conferences, I studied to bring out the principal characters presented by the convulsive seizures to which they are subject.

You have been able to recognize, with ease, that we have not here to deal with common attacks, which can be assigned at once and without discussion to the classic type. Nor is it merely by their great intensity that these convulsive phenomena are distinguished, but also by the form they assume; and what most strikes the observant witness is to find amongst the clonic convulsions of hysteria, certain more or less marked features which recall the phenomena of *epilepsy*.

In point of fact, the convulsive form of disease which is found in all these cases, is that which has been designated, in these latter times, by the name of *hystero-epilepsy;* and, remember, it is the only form met with in these patients. These women would not, therefore, be simply hysterical patients, they are all *hystero-epileptical*. In what respect do they differ from ordinary hysteri-

cal patients? This is a question concerning which it is important to have a clear understanding, and in order to secure that object, I request your permission to treat the matter at some length.

I.

If we keep to the terms of the denomination generally employed —*hystero epilepsy*—it would appear as if no misunderstanding could arise. It signifies that in patients, so affected, hysteria is present in combination with epilepsy, so as to constitute a mixed form, a kind of hybrid composed half of hysteria and half of epilepsy. But does this appellation, in reality, accurately interpret the phenomena? Superficially looked at, it would seem to do so, since we have recognized in the seizures some of the features of epilepsy. This, in fact, is the manner in which most modern authors appear to understand the term. According to their view, hystero-epilepsy would be a mixture, a combination of the two neuroses, varying in proportions in different cases; it is not epilepsy alone, nor hysteria alone, but both together.

Such, I repeat, is the most popular doctrine. However, it is far from being universally accepted, and the camp of its adversaries still reckons many adherents. These refuse to admit the legitimacy of this hybrid, half-epilepsy, half-hysteria. They do not, indeed, deny that epilepsy and hysteria may coexist in the same individual. The most superficial observation would protest against any such assertion. There is nothing to authorize the belief that these diseases are antagonistic, and it might even be possible, though it has not been proved, that patients affected by one of them, might by that very fact be predisposed to contract the other. But, under such circumstances, it is added, the convulsive accidents remain distinct and separate, without exercising reciprocal influence over each other, in any marked manner, and, above all, without mingling confusedly so far as to justify the creation of a mixed intermediate species, in one word, of a *hybrid.*

What, then, according to this view, is the signification of those attacks, the existence of which is so clearly established by the very cases that form the foundation of our study, and in which epilepsy seems mixed up with the ordinary symptoms of convulsive hysteria?

Epilepsy would, in their opinion, be present here only in the external manifestation; it would not be substantially existent. In other words, we would have, in these cases, hysteria solely and always present, taking on it the semblance of epilepsy. The term *epileptiform hysteria*, which, if I err not, Louyer Villermay was one of the first to employ, would serve to designate these mixed attacks. The convulsion, epileptic in form, would here appear, as it appears in so many other affections of the nervous system, as an accessory

element, without altering in anything the nature of the original disease.

II.

That, gentlemen, is the thesis to which I give my entire adhesion. It has already been maintained by some most competent authorities. Of them, I may cite Tissot, Dubois (of Amiens), Sandras, and M. Briquet, who are very explicit on this question. "Hysterical seizures," says M Tissot, "sometimes closely resemble epilepsy. Hence, they have been classed as a particular form of hysteria, under the name of *epileptiform hysteria.* But, nevertheless, these seizures have not the true characters of epilepsy."[1]

M. Dubois (of Amiens), considers epileptiform hysteria, as hysteria with an extra degree of intensity superadded to its symptoms,[2] Sandras expresses a similar opinion.[3]

M. Briquet, whose article on this subject bears the mint-mark of the soundest observation, says that this species of *hysteria, with mixed attacks*, is only a particular form of hysteria—is simply very intense hysteria,—the prognosis is not essentially modified: the nature of the cause which occasioned the hysteria and certain conditions special to the affected individual, account for the modifications observed in the form of seizure. The nature of the hysteria is not, itself, radically altered.

Be good enough to remark, gentlemen, that this is something more than a mere question of words; it is a question also of nosology, and consequently, a question of diagnosis and of prognosis. These circumstances will, I trust, suffice to justify in your eyes the details on which I am obliged to enter, in order that the conviction which I entertain may take its place in your minds.

III.

Let us, therefore, inquire upon what basis the prevailing doctrine reposes. Hysteria and epilepsy, it is alleged, may be combined in different ways in the same patient. M. Beau, who studied in this hospital, states that he found this combination in 32, out of 276 patients. It takes place in different modes, and the following categories may be legitimately established.

A. In the first group, the hysterical seizures and the epileptic fits remain distinct; this is what M. Landouzy proposes to call *hystero-epilepsy with distinct crisis.* Well, gentlemen, that would be the most frequent form, seeing that 20 out of the 32 cases reported by M. Beau belong to it. Two subdivisions, however, should be established in this species:—

[1] Tissot, 'Maladies des Nerfs,' t. iv, p. 75.
[2] Dunant, 'De l'Hystéro-Epilepsie,' p 11.
[3] Sandras, 'Maladies Nerveuses,' t. i, p. 205.

1st. Epilepsy is the primary disease: upon this stock hysteria becomes grafted in due time, that is to say, most frequently at the period of puberty, under the influence of certain causes, and of moral emotions in particular.

A case which M. Briquet quotes from Landouzy deserves to be summarized for your instruction as bearing upon this point. A young woman, who had been affected with epilepsy from her childhood, got married at the age of eighteen. The disease, which she had concealed, soon showed itself. Hence arose vexatious disputes which engendered hysteria. The attacks, proper to the two neuroses, were separate and preserved their specific characters, without either being influenced by the other. A reconciliation having taken place on account of her pregnancy, between the patient and her husband, domestic peace was re-established which caused the hysteria to cease, but the epilepsy persisted.

2d. At other times, epilepsy is superadded to hysteria. This condition appears to be much rarer than the preceding. M. Briquet, however, reports a case which came under his own observation in which the attacks were distinctly separate. The mind becomes obscured, in the long run, in patients belonging to this class, owing undoubtedly to the influence of the epilepsy.

3d. Some other combinations, of a secondary order, have been mentioned. Thus:—

a. Convulsive hysteria coexists with minor epilepsy [1] (Beau, Dunant).

b. Convulsive epilepsy is superadded to some of the phenomena of non-convulsive hysteria, *e. g.*, contracture, anæsthesia, etc. We have a case of this kind among our patients.

But these different combinations alter nothing in the essence of things. Most frequently the two diseases, in hystero-epilepsy, exist simultaneously and proceed their several ways, without reacting on each other in any serious manner, each of them preserving its own characteristics and proper prognosis. With respect to this first form of hystero-epilepsy all authors are agreed. The second form only is concerned in the debate.

B. In this form, the *hysteria and the epilepsy are coeval;* they both develop at the same time. Here the crises do not remain distinct; they have never been so. From the outset, the intermingling had been effected, and, in subsequent attacks, the two convulsive forms will always show themselves combined, though in varying proportions, without being ever, at any moment, completely dissevered.

[1] The *petit mal* of French authors. This form of the disease, so distinct from the common form, to which the name epilepsy is popularly applied, and yet so important in itself, especially when questions of hereditary predispositions arise, seems to deserve a distinct designation. (S.)

To this condition the name of *hystero-epilepsy with combined crises* has been given. In the technical jargon long employed in the special wards of La Salpêtrière, these crises, in such cases, are called "*attaques-accès*" (which we may translate "seizure-fits").

IV.

Is there really any *epilepsy* in these mixed crises? Such is the question which we have now to discuss. With this view, it is right that we should take the description of hystero-epilepsy with mixed crises, as agreed upon by authors, and examine it under all its aspects. From M. Briquet, in especial, I borrow the description of the seizure-fit. It seems to me to be in complete concordance with the results of my own observation.

a. From the outset, the mixed attack assumes its proper character; from that moment, it is epileptiform hysteria. I would recall to your memory the patient Etch—, who, in her first attack, fell into the fire, and injured her face.[1]

b. The hysterical aura, such as we have described it, always constitutes a premonitory symptom. This aura, generally of long duration, occupies the abdomen, the epigastrium,—at all events, it does not affect the head alone from the very first, nor one of the extremities, as takes place in epilepsy with aura. Hence it is perfectly exact to say that patients suffering from hystero-epilepsy with mixed crises are nearly always forewarned in sufficient time to enable them to take precautions or to seek a place of refuge, when the fit is coming on.

c. In the convulsive attack, the *so-called epileptic phase* generally presents itself first, to open the scene. The drama begins—a sudden shriek, extreme pallor, loss of consciousness, a fall, distortion of the features—then tonic rigidity seizes on all the members. This rigidity, remark it well, is rarely followed by the clonic convulsions, brief in duration, limited in oscillation, predominating on one side of the body, such as we see them in true epilepsy. Nevertheless, the face may become greatly tumefied and violet-colored. There is foaming at the mouth, and the foam is sometimes bloody on account of the tongue or lips having been bitten. Finally general relaxation of the muscles may follow, with coma, and stertorous respiration during a less or greater length of time.

d. To this first phase, which I repeat is the one chiefly concerned in the dispute, the *clonic phase* succeeds. Then all is hysteria: great gesticulations, having a purposive character, supervene, and sometimes violent contortions are made, characteristic of the most various passions, such as terror, hatred, etc.[2] At the same time *paroxysmal delirium* breaks out.

[1] Lecture XI. This patient is also mentioned in Lecture IX.
[2] See *ante*, figures 19, 20, and 21.

e. The termination of the attack is marked by sobs, tears, laughter, etc.

These different phases do not always succeed each other in so regular a manner; they get entangled occasionally, and now one, now the other predominates. In the patient C—, for instance, the tonic phase prevails to a great extent over the other, and sometimes it is almost exclusively manifested.

V.

We have arrived, gentlemen, at the critical point. In what does this hysteria with complex crises differ from ordinary hysteria, if it be really separate? In what does it resemble true epilepsy, if there be reason for such an approximation?

Is the appearance of tonic convulsions a novel and unwonted fact, in the classical description of the common hysterical attack? Certainly not. It is not really exceptional, in common hysterical attacks (when no one thinks at all of interpolating the epileptic element), to see the supervention of tonic convulsions occur, having an epileptiform character, especially at the beginning of the seizure. All authors are agreed upon this point. These convulsions are occasionally so marked that M. Briquet has been induced to establish, side by side with the clonic or classic hysterical seizure, a species of seizure in which *semi-tetanic stiffness* predominates in the body and members. Does it not, therefore, seem already probable that the so-called epileptic form is, properly speaking, only the exaggeration, the highest degree of development of this *variety* of common hysteria?

VI.

If, on the other hand, we turn our gaze upon true epilepsy, we shall meet with a certain number of characteristic peculiarities of which we can easily make profitable use.

We should point out, in the first place, that, according to the description already given, the epileptic type is never represented in the seizure fits, save in an imperfect manner, in rough outline as it were; but, indeed, that alone would not be a decisive argument. Here is a more significant character.

Never, in descriptions of hystero-epilepsy with mixed attacks, do you find mention made either of the *petit mal*, or of the *epileptic vertigo*. We might also add, as supplying material for an important distinction, that, in this form of hystero-epilepsy, even the most intense epileptiform attack is judging from our own observation modified and sometimes even arrested in its development by *compression of the ovary*. This never happens in true epilepsy, as we have over and over again assured ourselves by experiment.[1]

[1] V. *ante*, Lecture XI.

In cases of mixed attacks, even when frequently repeated, it is acknowledged by authors, that obnubilation of the intellect and dementia are never the consequences of these seizures. This is contrary to what would almost necessarily follow, if epilepsy were really in question. I cannot do better, in connection with this, than recall to your mind the case of the patient Ler—, who, for nearly forty years, has been subject to the most violent epileptiform hysteria. This woman is, no doubt, odd, and whimsical in her ways, but her intellect remains what it was at the outset. The information we have received, on inquiries made, do not permit the survival of any doubt as regards this fact. In short, in cases of this kind, the prognosis is nothing different from that of intense hysteria. Such is likewise the opinion of M. Briquet.

From this consideration a practical conclusion is deducible, well calculated to command your attention.

There is, lastly, another characteristic on which I beg leave to dwell at some length, because it has not hitherto been noted, so far as I am aware, and because, in my judgment, it is decisive. This characteristic is yielded by thermometrical exploration; and I hasten to seize the opportunity which presents itself now of showing you, by a new example, the advantage which may be derived from this mode of investigation in the clinical treatment of diseases of the nervous system.

It is not, gentlemen, that the tonic epileptiform convulsions of hysterical patients differ, in any respect, from the convulsions of the epileptic attack, so far as changes of central temperature are concerned. The tonic hysterical seizure, if it have but a certain intensity, raises the temperature by 1° C. (=1.8° F.), nay, by a degree and some tenths (38°, 38.5° C.=100.4° F., 101.3° F.), exactly as we find to result from an attack of true epilepsy. This is a fact the accuracy of which we have had many opportunities of testing in these wards.[1]

But if, as regards thermic elevation, the attack of epileptiform hysteria and the attack of true epilepsy be identical, it is quite otherwise when we have to deal with those fast following fits that constitute what, as regards epilepsy, have been called in France *les series* or *etat de mal* (= *status epilepticus*,—which we may translate by the term *epileptic acme*).

Of this *epileptic acme* we can distinguish two kinds: the *minor acme*, (*les petites series*), constituted by from 2 to 6 fits, and the *major acme* (*les grandes series*), in which from 20 to 30, or even more fits, have been reckoned in the twenty-four hours. I address myself exclusively to the latter, because the phenomenon, on which I wish to lay stress, then manifests itself in its typical state of full develop-

[1] Bourneville, 'Études Cliniques et Thermomètriques sur les Maladies du Système Nerveux.'