

The best condition for a perfect demonstration of the effects of ovarian compression, in such a case, is that the patient should be laid horizontally in dorsal decubitus, on the floor, or, if possible, on a mattress.<sup>1</sup> The physician then, kneeling on one knee, presses the closed hand or fist into that iliac fossa, which he had previously learned to regard as the habitual seat of the ovarian pain.

At first, he must throw all his strength into the effort in order to vanquish the rigidity of the abdominal muscles. But, when this is once overcome and the hand feels the resistance offered by the rim of the pelvis, the scene changes and resolution of the convulsive phenomena commences.

The patient soon begins to make numerous and sometimes noisy attempts to swallow; then consciousness returns almost at the same time, and now the woman either moans and weeps, complaining that you are hurting her (as in the case of Marc—) or else she experiences relief, and testifies her gratitude; "Ah! c'est bien! cela fait du bien!" is always the cry of the patient Gen—, under such circumstances.

Whichever happens, the result in short is always the same, and if you but continue the pressure for two, three, or four minutes, you are almost certain to find all the phenomena of the seizure disappear as if by magic. You may, besides, vary the experiment and at your pleasure, by removing the compression and again applying it, you can stop the seizure or allow it to recur as often almost as you like.

When once we have definitely overcome the obstinate resistance which the abdominal parietes always offer at first, it is not necessary to employ all one's strength, and the application of the two first fingers of the hand to the presumed seat of the ovary is sufficient to produce the desired effect. However, the operation, if it require to be prolonged for some minutes, is always rather fatiguing to the physician. I have contemplated modifying the *modus operandi*.

Perhaps, you might make use of a bag filled with shot, such as M. Lannelongue has employed for a different purpose, or the application of an appropriate bandage might be tried—this is a question to be considered. At present, the assistants in the wards who have been instructed in the method of manipulation described, apply it day by day in the case of those patients to whom it is really beneficial.

<sup>1</sup> It may not be amiss to remark that, if the seizure occur whilst the patient is reposing, the method of compression described can also be applied without removing her from bed. Applied in this manner, by Professor Charcot, I have been a witness to its instantaneous effect, in the hysterical wards of La Salpêtrière. (S.)

## IX.

It is singular enough, gentlemen, that a method the practice of which is so simple and which, undoubtedly, is capable of rendering real service, should have fallen, as it has fallen in our days, into complete disuse. As I have already intimated, the invention of this process is far from being my own: it may possibly be traced to a very ancient period; it is certain that it dates from a time anterior to the sixteenth century. The following is what I have learned in reference to it, from some researches made rather hurriedly amongst the dustiest, and therefore the least frequented, volumes of my library.

Willis,<sup>1</sup> in the 17th century, in his treatise on convulsive disease, expressed himself as follows: 'It is certain,' he says, 'that the convulsive spasm which comes from the belly is arrested and can be prevented from ascending to the neck and head by a compression of the abdomen, determined by arms being clasped round the body, or by means of bandages drawn very tight.' He states also that he succeeded himself in stopping a fit, by pressing energetically with both hands joined together upon the lower part of the belly. But Mercado<sup>2</sup> (in 1513) had long previously advised the use of *frictions on the abdomen*, with the object of reducing the womb, which he supposed to be displaced, according to the old doctrine.<sup>3</sup> One of his countrymen, Monartès, it seems, went about it in a more determined manner, for he placed a large stone on the patient's belly during the seizure.

It does not appear, however, that this custom prevailed widely; for I do not find it mentioned in Laz. Rivière, nor in F. Hoffmann. Boerhave alone, at the beginning of the 18th century, insists anew upon compression of the abdomen during the hysterical seizure; it should be applied, according to him, by means of a cushion placed under sheets drawn tight, and extending from the false ribs to the crests of the ilia. In this manner, he says, you give almost certain relief to the patient, provided the sensation of the *globus hystericus* has not yet ascended beyond the diaphragm.<sup>4</sup>

In modern times, Recamier, reviewing this method, which, as you see, was already ancient, placed on the belly of the patient a cushion upon which an assistant took his seat. His example has been but little followed, so far as I am aware, except by Négrier, the Director of the School of Medicine of Angers, whose 'Collection of facts relating to the history of the ovaries and of the hys-

<sup>1</sup> Willis, 'De Morbis Convulsivis,' t. ii, p. 34.

<sup>2</sup> D. L. Mercado, 'Opera, tit. iii, De virginum et viduarum affectionibus,' p. 546, Francof, 1620.

<sup>3</sup> Négrier, "Recueil de faits pour servir à l'histoire des ovaires et des affections hystériques de la femme," Angers, 1858, pp. 158, 169.

<sup>4</sup> Van Swieten, 'Com. n.,' t. iii, p. 417.



terical affection of females,' published in 1858, does not, however, appear to have attracted much attention. The process adopted by Négrier is a more methodical one than those employed by his predecessors; in the application of compression, it is the ovary he aims at, 'a strong and broad pressure exerted by means of the hand upon the ovarian region is sufficient in many cases,' remarks Négrier, 'to ward off and completely suppress the convulsive seizure.'

But, let us put aside for awhile the methods of regular medical practice, and see what have been the processes by means of which, in certain celebrated hysterical epidemics, the assistants gave relief to the "convulsionnaires." Among the modes of succour adopted, we find mention made of one very curious custom well worth examining, the original notion of which must, in all probability, have been owing to the suggestion of some "convulsionnaire;" I allude to *compression of the abdomen*. There are, in fact, hysterical patients, who, on experiencing the premonitory pains of the aura, instinctively seek relief in compression of the ovarian region. Such is the case, for instance, as regards one of our patients, named Gen—, whose symptoms have been already discussed. This woman has long been accustomed to arrest the development of a seizure by compressing the left ovary; she generally succeeds when the invasion of the attack does not take place with great rapidity. If she fail in her effort, she calls on the attendants to help her in the operation.

Let us examine a little more closely these incidents of convulsive epidemics, as we find them narrated in history: they supply material for a retrospective study which is not devoid of interest.

The learned Hecker, writing of those who were affected with St. John's Dance,<sup>1</sup> remarks that they frequently complained of great epigastric pain, and requested to have their abdomen compressed by bandages.

But, in reference to this subject, we find the most interesting documents in connection with the epidemic of St. Médard,<sup>2</sup> as it is called. You are aware how this took place when the religious exaltation of the Jansenists, persecuted on account of the Bull Unigenitus, was at its climax. The epidemic, which began at the tomb of Deacon Pâris, who died in 1727, presented two distinct periods.

The first was chiefly remarkable, at least from our point of view, on account of the cure of a certain number of sick persons, amongst whom were several suffering from well-attested permanent hysterical contracture.<sup>3</sup> In the second period, predominated con-

<sup>1</sup> Hecker, "Danse de St. Jean," Aix-la-Chapelle, 1374, "Epidemie de St. Witt," à Stra-bourg, 1437.

<sup>2</sup> Carré de Montgeron, *loc. cit.*

<sup>3</sup> Bourneville and Voulet, "De la contracture hystérique permanente," pp. 7-17, Paris, 1872.

vulsions of a more or less singular character, but which, in short, differ in nothing essential from those which characterize hysteria when it assumes an epidemic form. Now, it was at this period that the practice of giving the *secours* (as it was called) made its appearance in the epidemic of St. Médard.

Of what did this succour consist? In most cases methods were employed to cause firm compression of the abdomen, or else violent blows were given it with some instrument. Thus there were: 1st, the succour administered by means of a heavy andiron, with which the abdomen was repeatedly struck; 2d, the succour given by means of a wooden beetle or large pestle, which differs little from the former; 3d, in this case, a man clasped his two fists together and thrust them, with all his might, against the abdomen of the "convulsionnaire," and, the better to succeed, he called other men to assist him; 4th, three, four, or even five persons got upon the body of the sufferer—a "convulsionnaire," called by her co-religionists, Sister Margot, had a particular predilection for this species of succour; 5th, finally, there is a case where long bands were disposed so that they might be drawn tight to left and right, and thus compress the abdomen. These modes of succour, whichever kind was adopted, were always, it appears, followed by great relief.

Hecquet, a physician of the period, declined to see in these convulsions, which others attributed to divine influence, anything but a natural phenomenon,—and so far he was perfectly right. But I cannot share his opinion when, in his work entitled, 'Du Naturalisme des Convulsions,' he maintains that the modes of succour were nothing else than practices suggested by lubricity. For my own part, I do not well see what lubricity could have to do with blows of pestles and andirons administered with extreme violence, although I am far from forgetting what a depraved taste may give birth to, in this affection. I believe it is very much simpler and very much more legitimate to admit that the succour—apart from the amplifications suggested by a love of notoriety—corresponded to an empirical practice, the result of which was to give great relief in cases of hysterical seizures.

#### X.

You have assuredly remarked, gentlemen, the analogies which exist between this arrest of hysterical or hystero-epileptical convulsions, determined by abdominal compression, and the arrest of convulsions which is sometimes effected by a *ligature of the limb* from which the phenomena of the aura, in such cases, take their rise. This, perhaps, is the place to remind you that a sudden flexure of the foot causes, as M. Brown-Séquard has shown, the immediate cessation of the convulsive tremulation of *spinal epilepsy*,



observable in certain cases of myelitis. You are not aware that, in *experimental pathology*, these clinical facts find, to some extent, their explanation. I cannot enter into details at present, let it suffice to remind you that numerous experiments on animals bear testimony to the fact that suspension of reflex excitability of the spinal cord may be caused by irritation of the peripheral nerves. Thus, the experiment of Herzen shows us that, in the case of a decapitated frog (which was consequently placed in an excellent condition to augment to the utmost the reflex excitability of the spinal cord), if the lower portion of the cord be irritated it will be impossible, so long as this excitation subsists, to call into action the excitability of the superior extremities. And, on the other hand, if you tie a ligature tightly round the upper extremities of a frog, similarly decapitated, so long as this ligature remains, the excitation of the inferior extremities will not be followed by reflex movements. This, at least, is what is demonstrated by Lewisson's experiment.

However, although these facts are more easily analyzed they are not, in the actual state of science, more easily explained than the corresponding phenomena observable in man.

## XI.

Time presses, and I cannot dwell any longer upon this subject. I should, however, have liked to show you the importance, from a practical point of view, of suppressing severe fits of hysteria, or, at least, of moderating their intensity. But this aspect of the question may be more appropriately illustrated when I shall have described, in another conference, the consequences which follow reiterated fits,—otherwise termed the *hystero-epileptical acme*.<sup>1</sup> I will confine myself, at present, to formulating as follows, one of the conclusions deducible from the present study:—

*Energetic compression of the painful ovary has no direct influence over most of the permanent symptoms of hysteria, such as contracture, paralysis, hemianæsthesia, etc.; but it has a frequently decisive effect upon the convulsive attack, the intensity of which it can diminish, and even the cessation of which it may sometimes determine.*

## XII.

I have, in conclusion, gentlemen, to introduce to your observation the patients whom I have had chiefly in view in the preceding description, and to point out the most salient peculiarities which they present.

<sup>1</sup> In French, *état-de-mal hystéro-épileptique*. French pathologists employ the term *état* (*status æuus*) to designate that period of a disease when the symptoms having attained their utmost intensity, may remain for some time stationary, as it were. (S.)

CASE I.—Marc—, æt. 23, suffering from hystero-epilepsy since the age of 16. It is not certain to what cause the origin of the disorder should be attributed. However that may be, she presents the following phenomena of local hysteria: *hemianæsthesia, ovaria*, and *paresis*, on the left side. She is likewise subject to frequent vomiting, and has had *achromatopsia* of the left eye.

The attacks are preceded by a characteristic aura; the premonitory phenomena start from the left ovary, and the cephalic symptoms are very marked. With respect to the seizures, they are composed of three periods; *a*, tetaniform, epileptiform convulsions, foaming at the mouth;—*b*, (period of contortions) great movements of the body and lower extremities; during this stage, the patient gives utterance to strange words, and seems a prey to moody delirium:—*c*, tears and laughter announcing the end of the attack. In her case, a prompt and absolute cessation of all the phenomena is determined by compression of the left ovary.

CASE II.—Cot—, æt. 21, hysteria began at the age of fifteen. The ill-treatment she had suffered from her father, who was addicted to alcoholic excesses, and her subsequent career as a prostitute, have doubtless exerted a certain etiological influence. The local hysteria is still more marked in this case, than in the former one. We have to note on the right side *hemianæsthesia, ovarian pain*, and *permanent contracture with tremulation* of the lower extremity.

The attack is heralded by a distinct aura, proceeding from the right ovary, and terminating in very evident cephalic symptoms. The convulsions, which are chiefly tonic, are complicated by epileptiform phenomena: C— bites her tongue, foams at the mouth, etc. The period of contortions follows, and is very intense. The attack frequently terminates by contortions of the pelvis, with laryngeal constriction, tears, and an abundant flow of urine. In her case, compression of the ovary modifies the intensity of the fit, without, however, arresting it. In the first months of the year, this patient was stricken with the *hystero-epileptical acme*; to which we will return in another lecture.<sup>1</sup>

CASE III.—Legr— Geneviève, was born at Loudun. The coincidence is curious—for that, you know, was the scene of the sad drama of which Urbain Grandier was the victim. Geneviève is 28 years of age; her hysteria dates from the period of puberty. Among the permanent symptoms of local hysteria, we observe well-marked *left hemianæsthesia, left ovarian pain*, with easily discerned tumefaction. Her mind, finally, is in a strange state.

The *aura* is very distinct, and the cardiac palpitations and cephalic phenomena constitute the predominant symptoms. Each seizure is

<sup>1</sup> This case is detailed in full in the treatise by Bourneville and Voulet, 'De la contracture permanente.' Obs. viii, p. 41.



divisible into three stages: 1st, epileptiform convulsions, foaming, and stertor; 2d, then contortions of the limbs and entire body; 3d, the period of delirium, during which, at the close of complete attacks, she relates all the incidents of her life.

Sometimes the patient, in this latter phase, has hallucinations; she sees ravens and serpents; moreover, she commences a kind of dance, and then she exhibits, as it were, in an embryonic state and sporadic form, a specimen of those dances of the middle ages, described under the name of *saltatory epidemics* (or the dancing mania). In connection with this, I would have you note that certain cases of hysteria—forming, in some sort, varieties within the species—present in a rudimentary state the different convulsive forms which are exhibited in a highly developed state in the time of epidemics. This, indeed, is a point which Valentiner has thoroughly discussed in his interesting work on hysteria.<sup>1</sup>

In Geneviève's case, compression of the ovary determines what we might call a sudden arrest of the attack. She has a clear conception of its influence, for she herself tries to compress the region which gives birth to the aura, and when she cannot succeed, she, as we have already mentioned, calls for help from the attendants.

CASE IV.—Ler—, æt. 48, is a patient well known to all the physicians who, during the last twenty years, have frequented this hospital, in the discharge of various duties. In other words, hers is a *cas célèbre* in the annals of hystero-epilepsy. You will find the early portion of her history narrated in the thesis of M. Dunant (of Geneva). Ler— ceased to menstruate four years ago, notwithstanding which, the nervous accidents persist. We called on you just now to observe the presence of a rudimentary form of *Tarantism* in Geneviève's case; Ler— is a *Demoniac*, one "possessed by a devil,"—or, again, she presents the image, not much fainter than the reality, of one of those women who were called "Jerkers" in the Methodist Camp Meetings, and who assumed the most horrifying attitudes in their paroxysms. (See *Figs. 19, 20, and 21.*)

The probable cause of these nervous accidents in the case of Ler— deserves mention. She had, as she says, a series of frights: 1st, at the age of eleven, she was terrified by a mad dog; 2d, at the age of sixteen, she was struck with horror at the sight of the corpse of a murdered woman; 3d, at the same age, she was again terrified by robbers, who, as she was passing through a wood, rushed out to despoil her of the money she carried.

The components of local hysteria, in her case, are formed by *heminæsthesia*, *ovaria*, *paresis*, and momentary *contractures* of the upper and lower extremities on the right side. Sometimes the

<sup>1</sup> Valentiner (Th.), "Die Hysterie und ihre Heilung," v. q. extract in 'Mouvement Médical,' June, 1872.

phenomena invade the left side, and then, in accordance with our description, we find double ovaria, with double anæsthesia, etc.

The attacks, which are heralded by a well-marked ovarian *aura*, are characterized in the first stage, by epileptiform and tetaniform convulsions; after this come great gesticulations of a voluntary character, in which the patient, assuming the most frightful postures, reminds one of the attitudes which history assigns to the demoniacs (period of contortions, *Figs. 19, 20 and 21.*)



FIG. 19.—Attitude of Ler— during the attack; period of contortion. (Fac-simile of a sketch from nature.)

At this stage of the attack, she is a prey to delirium, and raves evidently of the events which seem to have determined her first seizures. She hurls furious invectives against imaginary individuals, crying out, "villains! robbers! brigands! fire! fire! Oh, the



dogs! I'm bitten!"—Reminiscences, doubtless, of the emotions experienced in her youth.

When the convulsive portion of the attack is ended, there supervene, as a general rule: 1st, hallucination of vision; the patient beholds horrible animals, skeletons, and spectres; 2d, paralysis of the bladder; 3d, paralysis of the pharynx; 4th, and lastly, a more or less marked permanent contracture of the tongue.



FIG. 20.—Attitude of Ler— during the attack; period of contortion. (Fac-simile of a sketch from nature.)

These latter phenomena occasionally render it necessary to have recourse, for several days, to the use of the catheter, and to the employment of the stomach pump for alimentary purposes.

Compression of the ovary, in this case of Ler—, is almost void of effect upon the convulsions.<sup>1</sup>

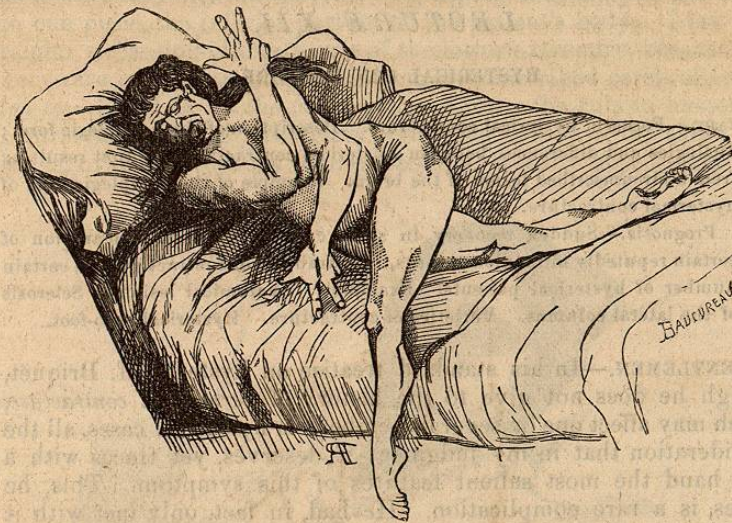


FIG. 21.—Hystero-epileptic attack; period of contortions. (Drawn by M. Richer from a sketch made by M. Charcot.)

CASE V.—You are already acquainted with this patient, named Etch—; it is she who furnished us with materials for our lecture on *hysterical ischuria*.<sup>2</sup> We note, also, in this case, the absence of *hemianæsthesia*, *achromatopsia*, *contracture*, and *ovaria* on the left side. The attacks are principally tetaniform and tonic. We have not, hitherto, had the opportunity of testing, in her case, the influence of ovarian compression upon the convulsions.

<sup>1</sup> We published the detailed account of this patient's case in the 'Progrès Médical,' (Nos. 18-33, 1875).

<sup>2</sup> Vide ante, Lecture ix.