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<thead>
<tr>
<th>Title</th>
<th>Hysteria Epilepsy</th>
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<td>Year</td>
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- numeration starts from p.2.
This affection there is a connection between, that commonly goes by the name) Hysteria and Epilepsy, but I would prefer to admit the use of the term to cases where there is first a state resembling Epilepsy in its spasmodic symptoms, but in which afterwards there are conditions which more closely simulate some of the grave cerebral lesions. Indeed there is no name yet coined which encompasses the disease in one word; and, therefore, for the present, this one will suffice for our purpose as well as any other which expresses a theory, and better can one which means nothing, or is only formed the better to conceal our ignorance from the vulgar gaze. Therefore, do not wish it to be understood that I believe the disease to be simply an aggravated form of Hysteria, but that it is Hysteria with something super-added, and I may at the utmost say by giving a definition.

**Definition:** A disease referable to the nervous system: characterized, at first, epileptiform paroxysms, but subsequently associated with exaggerated or diminished functional activity.
of some or all parts of that system, which is not of the body, but which are not necessarily permanent, or fatal.

As in the examination of the

History

Of many other diseases, we find examples of this affection are by no means rare or even uncommon, hut that it has prevailed in different countries from times remote. Yet in tracing the history, it is difficult, at times, and occasionally impossible, to discriminate between, and separate, real cases of this nervous disease from spurious ones.

It is interesting to go away back to the time of the earliest philosophers who dabbled in medicine, and to find, for instance, that Pythagoras and Plato referred to Hysteria, and believed that all the phenomena were the wanderings of the Uterus (which was supposed to be an animal) throughout the various regions of the body. This hypothesis, which reminds us of the theory, at one time propagated, of the arteries being the domicile of spirits of a misty character — absurd as it seems to us as unquestionably adopted by Hippocrates. Galen accepted the notion of the Uterus being wandering animal, but he concurred in
assigning it the phenomena of Hysteria. From this period we find various authors writing upon the subject; but Willis in the seventeenth century was, in his 'De Morbis Consulisus', one of the first in this country to give a succinct account of the disease and its treatment by compression of the abdomen. Then we have an account of the epidemic of St. Medard in France in 1573 in which time the patients were plicated with a notion of the unseen; and in these we find the treatment adopted was that of the Mercedae, who used frictions over the abdomen, (and sometimes more violent measures were resorted to) to reduce the wont which according to his notion was displaced.

With the rapid strides with which medicine has progressed since this period we have become — shall I say — enlightened — on the subject of Hysteria? Is the darkness of present light only more obscured? At any rate, much more is known in regard to the pathology of these nervous affections in the present century. The late Professor Laycock's teachings will long remain deeply stamped upon the minds of his
troubles, although far from being able to comprehend then, the depth to which he penetrated) in his 'Nervous Diseases of Women' (1840) was about the first who attempted to give a rational exposition of the thousand-and-one phenomena observed in certain hysterical-like cases; and since his book appeared, the subject has been taken up and studied by most eminent men, at home and abroad, with the result that we have made steady advances in the elucidation of the symptoms of this mysterious affection.

I will here give a short sketch of the Symptoms of Hysteria-Epilepsy as I have seen them. They are already pretty well known, but it is requisite that I should summarize them here so that I may be able afterwards to refer to them more directly.

The patient has for some time back declined health; not perhaps to any great extent or, it may be, sufficiently to attract notice—the only thing noted is many instances being suppression of the Catamenia. Then, at various periods, there is a sensation of pain in either side, commonly the left, which sometimes shoots...
into the cheek and then to the head; the globus hystericus may also be present. There is frequent nausea, accompanied by lassitude, loss of appetite, and habituated constipation, and one day these merge into the typical paroxysmal attack. The phenomena of the paroxysm may with advantage be divided into four periods.

In the first, the patient experiences what are known as the Premonitory Symptoms or Aura Hystericus. There is usually the pain arising in the left ilio-inguinal region of the abdomen, and passing off gradually into the Epigastrium, then into the throat, and sometimes described by the patient as issuing from the mouth. But the premonitory symptoms do not end here. As a rule, cerebral symptoms supervene in the form of hissing or strident noises in the left ear, hammering against the left temple, and not infrequently a dimness vision in the left eye. In some cases these symptoms exist in the right side of the body and head.

These sensations usher in, with a certainty which the patient himself becomes perfectly aware, and of which we have learned to take advantage, the second phase of the attack, in which the patient utters a shrill cry and falls
to the ground, as rigid, as pale, and as wanting in consciousness, as a statue of marble. This rigidity is most marked on the side in which arose the aura—generally the left. This the tonic convolution, varies in duration, but usually only a few seconds, and in turn gives place to the "Third Phase," in which the patient is either subject to clonic convulsions, most marked on the side of the aura, or to the most hideous contortions of the face and limbs. In the clonic convulsions we would recognize at once a similarity to those of sti-epilepsy; but the contortions, although they sometimes resemble those of the minor form of epilepsy—the petit mal of Trouseau—yet seem to be more characteristic of the hysterical element in the case.

In the last phase of the seizure we may have a deep sigh, like that of the purely epileptic patient, or tears and laughter, symbolic of hysteria. This may be taken as the description of typical seizure; but we must be prepared to witness many modifications of it, in different patients. For example, the third phase, that of clonic convulsions or spasmodic convulsions, may be entirely absent, and the
attack may begin and end with the tonic spasm. Or in addition to the contortions, there may be muttering delirium, during which the patient may repeat all the chief incidents in her life, or she may utter wild ejaculations that have reference to some sight or adventure she may have met with in early life; or she may be seized with that used to be called the "talking mania.

As a rule, as I have said, the third phase takes the form of contortions, that are themselves almost characteristic of hysteria, but we must bear in mind that instead of contortions we may have clonic spasms, in which the lomber and upper extremities of the head, and the lower jaw are convulsively contracted and relaxed, with a regularity that completely precludes the possibility of their being voluntary or purposely deceptive; and with a gradual slowing that is supposed to be pathognomonic of true epilepsy. In fact, in one case which came under my observation and to which I shall have frequently to refer, the clonic convulsions are in every respect identical with those of epilepsy, and were believed to be such by the medical man who first saw the patient.

But the different phases of the epileptiform
Seizure are not the only phenomena that make up the disease Hystero-Epilepsy. As a rule, others are superadded that we do not find usually in cases of Epilepsy. One of the most important concomitants, but nevertheless which we might fail to note if not forewarned of its probable occurrence, is Anesthesia, which continues the present for some time after the acute attack is over, and which is accompanied by Sclerosis; the latter however only applies to the integuments.

Another phenomenon, sometimes met with, is the suppression of urine, which does not depend upon organic lesion of the Kidneys. Beside the loss of sensibility in the skin, there is usually obliteration of the special senses upon the side of the body on which the Aura arose, and an inability to speak, which also persist for some time after the paroxysm.

Achromatopsia, or Colour-Blindness, may be found in different degrees; so with the loss of the senses of hearing, taste, and smell; but the power of speaking is lost suddenly, and regained as unexpectedly, whereas the hearing, and perception of colours diminish and re-appear gradually, as I shall
have occasion to show. In the patient whose case I have mentioned first, these phenomena were present on both sides of the body—the most delicious morsels placed upon her tongue were to her as insipid as distilled water; the most pleasing odours were indistinguishable; the most varied and glaring colours all appeared to her aberrant vision as black objects. Another accompaniment of the disease which must be noted is that condition of rigidity of the limbs, to which the name "Contracture," has been given. All these latter phenomena of the disease may as though hinted, make their appearance at very various periods in the course of the disease; they may be longer or shorter in point of duration; they may come on suddenly, or comparatively suddenly, and may disappear just as unexpectedly; they may remain for hours, days, or years; and recovery may take place at any time; as after a paroxysm, or from my such sudden emotion as fright, evil news, and so on; or, I shall relate elsewhere by the application of various foreign agencies to the affected part, or parts, of the body. The various elements also in the diagnosis will be considered further on.
The following is the report of a case which I take as a typical example of the true Epilepsy. — Mary M., aged 18 years, domestic servant. Has always enjoyed very good health, and been accustomed to hard work, especially in her last situation she considers she has been over-worked, and to this she attributes the stoppage of the senses two months ago (about the middle of February). About ten years ago she was bitten in the cheek by a horse; the wound healed, and the place is marked by a cicatrix. Twelve months ago she was standing on a chair which suddenly gave way, she fell, and suffered dislocation at the shoulder, which was reduced shortly afterwards. There is nothing further to be noted in her history, and she can give no reason for the stoppage of the menstrual flow two months since, except as I have stated the hard work in her family history there is nothing special to be noted, all the others, have constantly enjoyed good health; her father subject to Rheumatism occasionally, her mother is troubled at times with Neuralgia as a child older than she (the patient) was, idea of "Convulsions during teething" none
of her brothers, or sisters, have ever had fits of any kind, nor can her parents remember anything of the kind in their respective families. Patient is of a dark complexion, dark hair, her face had a always-anemic appearance — if I may use the expression — good features, and intelligent, but not beyond her station; she has nothing of the languidly, pathetically look nor "kiddies" her with the pale, sad, of thought" as is so frequently seen in cases of hysteria. Body well nourished, skin not thin, and fairly moist, without any eruption.

On Thursday last, April 11th, whilst at work she felt a pain in the left side which shot up to her head, and she lost consciousness. She recovered from this, and had no attack again that day, but had during the night the following day she came home and since then the fits have been very frequent coming every half-hour, or oftener. Then first she was in bed, lying on her back, unconscious; violent contraction of the muscles of the face, with squinting, eyelids being raised, and there was no winking; the hands were self-closed, but not clenched, and the arms raised and lowered again in a regular manner. On pressing the closed fist
well down into the pelvis on the left side, she almost immediately regained consciousness, without knowing that anything had been done to her, and was much surprised at seeing us all standing beside her; she was quite composed, and said she was perfectly well, she did not shed tears, or indulge in any untoward emotion, although she knew she had had a fit, and she thought she would go to sleep. Whilst speaking to her, pressure was practised in the same region as before, she screamed suddenly, and swayed into the same unconscious state, accompanied by the same contortions of the face, and movements of the arms, and on removing the pressure, she was again restored to the calm state. She uttered no cry during the paroxysm, and when it was over she had no recollection of any visions or dream. I may note here that this blown pressure was the first thing which restored her, and she had enough cold ice to brown her, thrown upon her, by her friends and others during the paroxysm, with no producing the slightest effect whatever. The her large doses of Potassium Bromide, and of the next night the fits had certainly diminished in frequency. She had a paroxysm
uring the time I was there which was relieved by Abdominal pressure as before; left after giving her another instruction to apply the hand as had done on the occurrence of a fit. I observed during the attacks that the temperature was always about 97°F, or 98°F, and the pulse ranged from 70 to 80 beats in the minute.

In April 14th, during my visit she had a convulsion attack, which came on very suddenly while she was eating. On regaining consciousness she found she could not speak, and communicated to me by writing what else she had to say. She was very much put out of her way, at losing her speech, and by the state, made various enquiries as to whether or not she would ever regain it, and was very pleased when answered in the affirmative. Her sense of taste on both sides was good, the senses of sight and hearing were correct, and so were motor sensation, and reflex action, there was rigidity of the extremities. Urine was only passed once a day and not in very large quantity, bowels constipated, for which she received an emetic. Respirations normal in my respect, heart’s action regular. Pupils dilate and respond to light; they were
eled during the paroxysm. She complains of a great deal of pain in the lumbar region and a creeping sensation up the spine, which is usually, however, limited to the left half of the body. In the left leg, feeling, and occasionally water runs from it, but there is no injection of the sclerotic or conjunctival vessels. She has had during the last few paroxysms, movements of the left leg, and then sensible says there is much pain in the right leg. There is also pain in the situation of the testicle in her cheek, where the horse hit her, she always sees a horse, but before she becomes unconscious, but knows it to be a hallucination.

April 16th. The fits are now modified in a sense, they do not last so long, but she struggles somewhat violently during the paroxysm. While in a sensible state, on being asked to raise the arms, she did so, but in an irregular jarring manner; but when she laid them down again there was a further movement. Asked to raise the left leg, she did so, and simultaneously there were jerking movements of the left arm, which she could not restrain, until the leg was again at rest. In the evening,
I found she was a little deaf on the left side. 17 ½ She has no pain now in the back, or either side of the abdomen; and no creeping sensation along the spine. She may feel about a good deal in the house, though she could not do as yesterday. For ten, when she attempted the erect posture, she felt giddy and weak, and was obliged to sit down again. She has not regained strength yet, and she cannot protrude the tongue even by great effort, beyond the lips, although she can move it from side to side.

Next day I found there was contraction of both legs, and she cannot move them at all; sensation is lost on the left side, but it on the right, indeed on the right she is the prickle of the needle acutely, and during fasting she was blindfolded. There is no contraction of the arms, and sensibility is normal, although sensibility lost on the left leg. I discovered that the perception of color was at fault on the left side, if shown in the calls is red, if she is shown white, yellow, she says it is red. Also on the left side she has lost the sense of smell, but applying a flower to the right side makes it "that is wallflower" without seeing the
Patient. April 19th. Has had only one paroxysm since yesterday morning, and since that she has recovered the use of her limbs, and the sensibility in these is normal. She has regained speech, which left her again about two hours afterwards. Her colour-perception was all colours to her appear black. The motoric movements in the limbs have now disappeared. On April 19th I saw her again. She still complains of headache which is confined to the left half of the forehead. She had no fit since my last visit. Having witnessed some of Prof. Charcot's demonstrations on patients having hemi-anesthesia, with obliteration of some of the special senses, I resolved to try the effect of some metals upon her. Applied silver, copper, tin, zinc, iron, lead, and platinum without any result. In the same case (below the chin) I placed two sovereigns, and in ten minutes she had twitchings in the mouth, and after two or three futile attempts she was able to speak. I next placed the same metal to the left temple, and she quickly began to perceive the different colours hour to her; and although she regained his faculty in so short a time that I could not note the order in which the perception
the various colours returned, was able on another occasion, as I find, that they returned and disappeared again in strictly mathematical order. Three sovereigns were then placed round the left leg, which at this time rigid as well as the right, in a few minutes there was complete mobility of each. I took pains to note the turn of speech as produced by the application of the metal. To-night for half-an-hour there was no perceptible effect, in forty minutes there were movements of the muscles of the arms and jaw, which were uncontrolable, these continuing for few seconds, cease; after a lapse of five minutes they return, and the patient as she opens her eyes is making attempts to speak, as we have seen a bad stammerer, but they are not produced in our patient by an effort of the will. This takes place six times, then there is a long inspiration, and then she ejaculates "ad-да- doctor! After this she will converse fluently enough, until it may she has another fit, and then she will jinks as suddenly, lose the faculty, of course she can protrude the tongue from the mouth now, without any extra effort, showing
that, the loss of the faculty, or I should rather say the power of speech is due to the contracture of the tongue, and by this term contracture I mean rigidity for it is not a spasmodic contraction. I think such as we find in Tetanus, for the legs have an appearance of violent contraction, but they are rigid. Yet she has had the pause. Tusta 10 day perfect on both sides, she has explained of a bad taste in her mouth, which I believe is due to the Bromide Potassium.

Although the application of the gold at first was the means of restoring the special senses for a time, I found that, as the fits became as frequent in occurrence, and the loss of knowledge was less frequent, so the metal seemed to lose its power, in fact about ten days after I first saw her. I tried the gold under the chin and after three hours there was no return of speech, merely a feeling of numbness. I applied the continuous current of a battery when the power was restored in a few seconds. I gave Chloride of Gold and Sodium to take internally, and occasionally used the battery to discontinue the Bromide. She continued to improve under this treatment.
became more and more isolated. At the end of the month she was apparently in good health, the catamenia re-appeared and the other symptoms disappeared. At the end of twelve months she had no further symptoms of disease. It is now twelve months since she was under treatment, and she has enjoyed good health during this period.

In any notes of this case I have recorded the results of retinal microscopic examinations from time to time, which mounted to nil. The fudens was if anything somewhat pale, the optic disc was clear and defined, without any haziness, and the central retinal artery and branches and the veins were not enlarged.

On one occasion, about two weeks after her illness began I conducted some experiments with a phonometric and battery to test the electric sensibility. The measurements were taken with a very delicate astatis galvanometer, and Wheatstone's bridge registering 1 Ohm in 50,000 Ohms. Resistance at the angles of the lower fist - 12,200 Ohms. The electrodes for obtaining proper contact consisted of two sovereigns wrapped...
Resistance between two electrodes (without the blotting paper) at the articulation of the lower jaw = 160,000 Ohms.

Resistance between two electrodes placed over the Radial artery at the wrist, on each side, = 230,000 Ohms. This was without the blotting paper.

Same as the last with the addition that the skin being well sponged to remove sebaceous and the electrodes wrapped in moistened blotting paper. Resistance 142,000 Ohms.

The reduction of the resistance in the last experiment when compared with the third is very striking, and shows that the skin必须 have been very dry. The resistance however is still very high for a great number of experiments upon healthy persons, I have never obtained resistance greater than 30,000 Ohms and this may add is very rare, the average have found to be about 6,000 Ohms, varying at different times from 5,000 to 8,000 Ohms.

The few notes I append relate to the other of this patients. He was a robust healthy-looking lad, about eighteen years of age.
He was passing along the street one night in the company of a friend, when a man rushed out of a court, and gave him a severe blow on the head with a stick. He fell upon the pavement insensible, but suffered no further hurt, as his companion not only kept off his assailant but managed to break his fall to some extent. He was taken home in an unconscious state and I saw him shortly afterwards, when he was quite insensible and seemed to be suffering from concussion of the brain. He remained in this state for about two hours when he rallied sufficiently to be able to answer questions, but before many minutes had elapsed he had a convulsive attack and struggled violently. This passed off and he was again quite sensible, he took thirty grains of Potassie Bromide, and ten for left him, having left word that the same should be given every hour in the above dose. The paroxysms came on very frequently until 2 A.M. and they resembled very closely the fits that his sister had previously been subject to. From 6 o'clock until eight he slept soundly, the breathing was not stertorous. When he awoke, he almost immediately was
izied with another paroxysm. He emerged from this, but had another attack in the afternoon. In the evening at the hour of visit, he had not had any more fits, and in consequence, the bromide was discontinued.

The following day he said he felt quite well but by advice, he did not go to work that week, the following week forever he did so, without permission, but from frequent inquiry afterwards, we never found that he had any after symptoms, and at the period (time April) he is in good health, as far as he knows.

We will now give the results of further experiments upon Mr. sister of the last conducted at a recent date (above ten months after recovery from her illness). With the same battery and galvanometer, we were used in the first experiments, and using the sovereign as the electrode, and at a "resistance" over the radial artery at the wrist, of 140°. The home was however raised again, with the skin moistened, and then the galvanometer registered only 30° at the angle of the lower jaw.
under the last conditions, and at the
articulation, the resistance was so small
that we could barely get an indication by
the galvanometer. Thus we found that
the "resistance" was very much diminished
in comparing this with former experiments,
taking into account of course, that the
regulation was the cause of the high
resistance (140°) recorded above, and
easily came to the true result by
concluding the result. We made a note at
the time of the fact, that the patient
experienced a tingling sensation in the
skin over the chin. A short time after
the application of the sovereign, and
could perceive the muscles at the
angle of the mouth contracting very
forcibly. This shows that the current
from the gold, affected her now, as
it would any other person in
ordinary health, and as it did in
her case, at the first, before the
anaesthesia, and contracture became
highly developed.

We have notes of three other cases of
Hyster- Epilepsy, the symptoms in all
being very mild-mannered. They have only
recently come under our charge, and
among the cases at present as complete
specimens, but in another part of this
paper we have considered their
symptoms as well, and have taken
from them, as well as the two cases
reported, evidence in support of the
view which we take of the pathology
of the disease, Hysteria-Epilepsy.
It will be as well to explain at this
tage, that a short account of this case
was given by me in the "British Medical
Journal," of February 8th, 1879.
The next is a case which will be seen to resemble the last one in many respects, but at in all.

W. A. at 30 years. Has been married five years, and her youngest child is sixteen months old. She has never been in very robust health, but at the same time does not remember being the subject of any special disease. She has been troubled with indigestion and nervousness. Her mother and father are alive. She herself has enjoyed good health, and so has the latter excepting for a laryngeal affection of the principal symptom of which is loss of voice, which she has suffered from for some years, and which some London physicians held him was due to an affection of the nerve. The patient's husband is a weak-looking man, and the children have not a healthy appearance. There was the first time anything particularly, only with her, was noticed the night her husband was awakened by hearing her moaning. He made ineffectual attempts to rouse her, and then called another to see her, they tried further means to waken her, and then proceeded...
I slap her face, and held Ammonia to her nose, thinking she was in a fit. This treatment producing no effect, they allowed her to lie as she was for three days (nearly). I saw her on the third day, her first attack, when I found her in the condition stated, namely of unconsciousness and from which she had not yet emerged. She was lying in bed, and apparently unconscious, moaning occasionally, but breathing quietly. Eyelids closed, the pupils were half dilated, and sluggish; the air dishevelled, the face appeared calm, and did not then seem contorted. The limbs were prone, and there were no movements taking place.

Testing the sensibility with a needle, she did not rise, and no true sensitivity seemed to be absent in both legs. The toes, however, showed a degree of reflex sensibility. She still moaned occasionally at first generally when the needle was pushed through the skin. There had been emission of urine, but not of feces.

As she lived some twenty-five weeks away from me, I did not return that day. She died a visit next day, and hook with
a powerful galvanic battery, the free use of the interrupted current from which, very few persons could bear for even a few seconds. The patient, found in the same condition as when I last saw her, applied one pole to each leg for some minutes, powerful contractions of the muscles of the leg and foot, were gradually induced, and there was redness of the skin when the wetted sponges were removed. Brent applied them to the arms, with the same effect as in the lower extremities. Afterwards galvanized various parts of the body and in the course of half an hour, the patient slowly recovered consciousness and sensibility.

I asked her if she was aware of anything that had transpired? She did not answer, and signed that she wished to write and gave her material for that purpose. I then elicited from her, that she went to bed feeling all right, and fell asleep but went nothing more until the present, and that by even powerful effort she could not speak; when asked to show her tongue she drew it towards the left, although the could move it laterally. She applied the galvanism
to the legs, and she motioned that the
felt it very acutely, and then in writing
aid she could not bear it, and that she
it not wish another application. I
noticed that her features were a different
expression altogether to what they did
while she was unconscious, but I could
certainly, wherein the alteration consisted.
I know is that from a remarkably
unpleasant-looking woman, she was
transformed into one of a somewhat pre-
possessing appearance. I applied the
continued current under the chin, which
caused contraction of the muscles, but did
not restore the power of speaking. Removed
the electrodes, and before I left the house she
spoke distinctly and she gave me
full accounts of her history, such as I
have given above. She dwelt upon no
particular symptoms or group of symptoms
in excess; being very much annoyed at
the involuntary voiding during the day.
I did not consider there was anything wrong with
her. Her own accounts of her previous history,
allied with what I have related, as have
said, and the latter obtained from her friends
left the battery with the friends, that they
might apply it in the event of her returning to
the state of unconsciousness in which she had been that morning.

the following day, visited her, and she was well as they left her. There was no

anesthesia now, and there was power of

motion throughout. I prescribed ferruginous

tonic, and did not see her again for three

days. She had been unconscious again

from the afternoon before, and was

moaning a good deal. Her friends did

not apply the battery, as they did not

understand the working of it.

I tried compression of the abdomen in

the ileo-hypogastric region on both sides

without any result; so I applied galvanism

again, with the result of restoring her as

before, after a certain time. Her friends had

some trouble in keeping the bed dry on

account of frequent involuntary convulsions.

she stated that she passed into the state

found her in, almost insensibly. She was

only aware of a painful sensation in the

right groin shortly before. Bowels had

stated regularly, but not involuntarily.

Ten her two or three times afterwards and

she had one other attack which was relieved

by the battery. She continued the tonic

treatment, and had no more relapses, she
rapidly attained her previous fair state of health, and during the last nine months has had no further symptoms of the kind.
The Pathology.

Under this head, we will in the first place consider some of the general principles of disease of the Nervous System which apply to Hysteria, Epilepsy, or allied neuroses.

We most commonly find in hysterical patients that there is a condition of general anemia and want of tone throughout the whole system; they very often suffer from Hysteria and Epilepsy as effects of the ataraxia at times, or some such affection which they do not look upon as being as a very serious nature; and which they therefore do not usually call attention to in the first instance, although it may afterwards give them the feelings which they are said to delight in exaggerating, and we generally find them anxious. But it is also to be noted that this is not always the case; they may, on the other hand, look strong and robust, they may have plenty of colour, and have nothing from the hysterical symptoms, healthy appearance. Yet we must also bear in mind that the person with an abundant capillary vascularity of the face, may, for all that, be anaemic; and indeed this is a matter of every-day
experience. However, apart from such samples of apparent constitutional vigour, the majority of hysterical persons are undoubtedly the subjects of general debility. We often find it stated that such patients are previously lived an idle and vacuous life, but statistics of such cases often go to prove the contrary, that there has been incessant fatigue, insufficient nourishments, and want of proper air and rest. Again, the cause has been assigned to the unsatisfied sexual desire, which, in such women as live in any circumstances, finds a ready subject to its morbid manifestation; but if this is, how do they account for the large number of hysterical patients in the St. Lazare, who have, previous to their admission, lived a life of daily prostitution? Such evidence goes further to show that the cause or the disease lies in the debility produced by such excesses.

As among persons we find what is popularly termed, "mendaceness", which means, that the subject of it is liable to be much affected by any untoward external circumstances, even of a very trifling nature, which in a healthy person...
would not attract notice; these "nervous"
persons are easily frightened, and such
things as a sudden noise, bad news,
etc., etc., sets them all shaking. Or, if
they are much left to their own society,
they brood over their various sensations,
and apprehend all kinds of dangers:
they are subject to cardiac palpitation,
phantom, and can not rest; and, when
last, they are overcome by sleep.
they are disturbed by frightful dreams,
such as some of the poets so vividly
describe. The morning brings relief so far
as these are concerned, but the victim is
not refreshed by her slumber, and feels
as if she had not been in bed at all.
Much the same thing occurs in chronic
alcoholism, where, through the blood-
 poisoning, an anemic state is produced
by want of nutrition, which is no doubt,
partly due to the direct effect of the
alcohol upon the corpuscles of the blood.
Whatever way the blood is deteriorated,
whether by the abuse of certain drugs as
alcohol, opium, etc., from want of proper
supply of daily food, or from comparative
absence of assimilative power in the
system, we shall have the same effect produced, namely, Anemia, or, more properly, Sanguinemia.

Given an individual, in whose system this general weakness exists, we have, thereby induced, a susceptibility to disease.

Proceeding in this direction we have in some cases what is known

A Pneumonia — a peculiar state

The constitution, which is hereditary, which can hardly be defined, and ultimate nature of which we have little knowledge,

manifesting itself in the body by a tendency that mostly to certain diseases, but diseases affecting a portion or portions of the body, which apparently have a stronger affinity for the disease than other parts of the system. As examples, we may take the woman who dies of malignant disease of the uterus, mamma, in her male offspring, we expect to see the same disease showing itself in the Testis, Stomach, Liver and so forth, at, side of the same malignant type.

Again, a man has been, in his offspring, expect to find her attacked, and not as in the parent, but the same
arrangements of the Endocrine system, exhibited as Menorrhagia, Amenorrhea, and the like, which have for their origin a gouty diathesis, and the hereditary nature of which is often proved by the beneficial action of certain drugs which relieved the sufferer's gout, but which in a female suffering from the same disorder with a different origin, would have no effect whatever.

If we had to give a description of that state, termed "diathesis," which in one shows itself by a tendency to disease in one system, and in another to disease of another system, we could not do it without knowing what constitutes individual temperament, of which of course at present we know nothing.

Nor in a woman, in whose family there is a trace of disease of the nervous system, such as Epilepsy, we will find that whatever disease she may be affected by, there is an inherent tendency thereto, to disease of the nervous system; and that whatever, one way or another, this system will be affected more or less by the morbid condition; when in another
person, it would not. Perhaps I should not include here reflex neuroses, such as traumatic Tetanus, although we have not, in subjects of the lack of sense, a special susceptibility of the Nervous System, it will be difficult to explain why many patients have similar injuries, and yet only some of these suffer from Tetanus.

Continuing with the individual, he has the tendency to Nervous Disease. An anemic condition of body occurs, the nutrition of the nerves and nerve centres will suffer deterioration in the first place, and then we will find the special disease showing itself. There will be anemia with all its symptoms plus the special effect — the epileptic; and, in this way, there may succeed such a combination of symptoms, as may well distract us in our attempts to analyse them.

That some diseases select certain parts of the systems of the body more than others, I think we cannot have better exemplified than in the action of some drugs. Have already mentioned
Opium affects the cerebral nerves, producing at first mental excitement, and afterwards stupor. Belladonna acts upon the spinal cord, and central nervous system. Strychnine also affects the spinal cord, without touching the cerebrum. That these drugs do not destroy the central nervous system may be demonstrated. Though we cannot discover their nature, their effects, certainly, are curative in medicinal doses, and in poisonous doses rapidly fatal. But with alcohol, their continued use or abuse will give rise to a morbid condition of the system which facts after they are discontinued, cutting in disease, which then proceeds by itself. The brain is affected in some people more than in others when disease attacks them, and this is frequently observed in diseases.
such as Acute Rheumatism, and in general exhaustion produced by grief and sudden loss of blood, as in post-partum hemorrhage and some wasting diseases. Although we may not always be able to distinguish or discern any difference in the external appearance of the person having a nervous diathesis, yet, in the mental character, we will find a susceptibility to emotion which is peculiar, can be traced throughout life, and which, in itself, constitutes a difference.

I have given the instance of the daughter of a man who suffered from gout, suffering from the same, just as gout, in its ordinary signification, but from chlorosis; and the successful treatment of both by the same remedies, showing that the nature of the case was the same. And as regards the transformation of certain diseases — without going into an account of the evidence which has been given to show that such gurs — I may mention the fact of Rheumatism, Epilepsy, and Chorea being allied forms of disease, and I believe further, that they are manifestations...
in different parts of the system of one disease; although the absolute proof of this is still wanting. It is however easy to understand that if the father had rheumatism, and the mother was of an sanguine, excitable disposition, their daughter might have a combination of the two dispositions. This is shown very well in the case of the lower animals. Fowlers are careful in their selection of the site and arrangement, that they may be able to produce offspring having certain qualities.

In first case there reported (gage...)

these relations are well-marked, and in case of the brother in whom more than ordinary symptoms occurred from an ordinary accident, is a proof I consider of the tendency which ran in the family. Two cases however, being otherwise strong and robust, the symptoms were transient, and he soon recovered; but should he afterwards affected by disease, should in whatever his ailments, refer to the nervous system, for a key to some of his symptoms. It not all.

In the case of the girl, we have a hereditary tendency present, although...
latent; and having by overwork, and perhaps insufficient food, produced a state of anemia, we find an excitation that latent tendency producing the symptoms of disease.

Passing from these general considerations of nervous disease, bearing upon the subject of this essay, we may proceed to a study of the special features of the disease Hysteria-Epilepsy, and shall consider first, the subject of Anosmia; previous to which however, it will be well to glance at a peculiar condition which is seen in these cases, namely, Asthmia.

This is sometimes a very prominent symptom, and one which, at the same time, is one of the most difficult to explain of all the phenomena of this disease. It had been observed now in a good many cases, some of which, it is true, turned out to have been erroneous, but the number of real cases which have occurred and where precautions were taken which entirely precluded the possibility of deception, leave no room for doubt on this point. The most sceptical would, I think, be satisfied if they saw such a patient confined in
straight raihcomb, and watched by eagle
eyes night and day, much the same as a
rapirate, and condenmed criminal might be;
AD ecct in all attempt at concealing any
inacation, and this carefull guard kept
regularly for days and weeks. It has
been done, but all bo no purpose: for, in the
two cases, there was no attempt at deception
theater, and long periods were passed
without any urine being voided.
In many of the patients, however, there
occasions urination, if I may so term
it, which was shown by the persisent
smiling of matter, in which the presence
urea was distinctly shown. One fact
which is very apt to make us sceptical
on this point, is, that in cases of
Bright's disease, a day or two's suppression
urea is not only serious but fatal; or
even in diseases not implicating the
hydrone at all, where the ureters are blocked
or example by calculi, it in a few days,
there is not relief given, by the passing away
the stone, very serious symptoms especially
of blood poisoning, may supervene.
Still, there have been exceptions to the fatal
termination, at least in such short periods of
suppression from renal disease, and I believe
that in the latest recorded case of ordinary disease, where there was total suppression of urine, the period for which it lasted was fourteen days. Such being the fact, we cannot but be surprised, when we find the hysterical patient with complete suppression for a much longer period— even months— without actually suffering any serious symptoms whatever. In the same class of patients we also find long periods of fasting, without any loss of flesh, and, strange as it may seem, there is no wasting of the muscles; neither is their electric sensibility in many cases diminished. In hysterical anuria there is not suppression of urine, in the ordinary sense of the term, for there is no disease of the kidney; and when the flow is re-established, there is at once the full secretive action of this organ. There is not obliteration of the ureters, so that we can at once eliminate the renal apparatus from daily consideration. There is no anasarca ever observed, so we cannot say that there is an accumulation of urinary fluid in the tissues; and in the analyses of the blood of such patients we do not find the products of tissue metabolism, which are contained in urine.
Occasionally, but not always, there is, as Shaw before mentioned, vomiting; and the vomited matter has been known to contain urea, and some other substances contained in urine. But what are we to make of these cases where there is not even vomiting, nor increased perspiration, nor purgation? By exclusion, we are left to one consideration, and that is, that the explanation of this phenomenon is to be found in certain portions of the nervous system. In arguing this point we are to remember, that in every organ there are distinct fibers in nerves, which preside over the assimilative functions of the organs of the body; that they have some the power to depress others, the power to melt these actions. Again, we are aware that certain drugs have the power to cause increased flow of bile, of saliva, and so on; and there are others which so act as to block up these secretions. We know, also, that the kidney can be so influenced by some agents, and thus we infer that there is an action of the drug upon this system of nerves by which their action is excited, or depressed. And in anuria, it is evident that there is no influence of the same kind exerted upon
the same system of nerves.

But the question may be put, "What of the waste material of the body? There is no outlet for it from your evidence — what becomes of it?" We argue, there is little, or a waste of tissue in such cases; and this seems conclusively proved by the fact that these patients, sometimes eating nothing and yet suffer from no diminution in weight. And, in those instances where there is ingestion of food and water, we find that these are the patients in whom there is no elimination of urinary constituent.

Again, admitting that the cause of murius lies primarily in a morbid state these nutritive nerves, in what does this morbid state consist? That, we cannot say positively, but further on, we may be able to see that one cause runs through the whole group of symptoms, namely, "disturbed or perverted action in these nerves or nerve centres. The action of Sea Loofe, and some other antitetanics, shows that they exercise a controlling action over the nerve centres which have to do with tissue changes; and goes so far to support our view that we can perceive that if this effect on these centres was pushed to the extreme
we should stop the transformation of tissue waste products; and then would be precisely such a condition as we have in the hysterical patient. What this action upon the nerve is, beyond what we have stated, we cannot tell; for, as in the study of medicine, we cannot proceed without a fundamental knowledge of anatomy, physiology, and chemistry, to we cannot tell the ultimate physiological, and pathological, state in the nerve fibres, until we have a knowledge of their more intimate structure and the laws which govern their functions. Moreover, we can say something about it, when we study the next phenomenon in Hysteria, crippling, namely,

Anesthesia, or Hemicraniesthesia, as it may occasionally be termed, when limited to one half of the body. This, as we have seen, may come on suddenly, and may not be immediately noticed; in fact, the physician often discovers it to the patient, and may disappear again in the same manner. It shows itself generally on one side of the body first, and, in different parts of the body, we can show the exact line of demarcation. It now differs in degree; for we sometimes find
There is insensibility to heat or cold, and also that there is coldness and pallor of the skin on the affected side. The anesthesia only affects usually the cutaneous structures, and a strange symptom of the insensibility is the absence of hemorrhage when the skin is wounded by prickling a needle into it. That is not due to any hemorrhagic action of the needle, as shown by passing it right through the affected skin, when blood is stained as usual. The mucous membrane on the anesthetic side is also affected, and the organs of taste, smell, vision, and hearing are either inactivated or the senses are lost. This insensibility does not appear to affect the viscera, for in one of our patients pain was complained of in the stomach, and also we remarked a painful sensation referred by the patient to the left inguinal region. This pain we considered to be situated in, or be emanate from, the hip socket for the following reasons: there is often anesthesia of the skin; the muscular wall at this part may also be prickled with a needle, and no pain, very little felt; this shows the pain is not in the skin, nor in the muscles, therefore must penetrate farther. What are the
gans which, in the adult female, lie in this part of the abdominal cavity? In the right side region we have the Cæcum occupying in the left the Sigmoid Flexure of the Colon; but this is not all; there are the ovaries.

For in our anatomical study of the dead body, we come upon the organs of generation all lying, as it were, in a heap in the pelvic cavity; but, during life, the uterus lies more vertically, with the broad ligaments, and Fallopian tubes extending out on either side in a state of tension, so that the ovaries come to be one on each side, against the ridge formed by the inlet of the pelvis, about midway between the Pubic Symphysis and the Sacrum.

This position would be indicated on the female abdominal wall by a line drawn between the anterior superior iliac spines and to fall a perpendicular from it to the cartilage of the ninth rib to the middle Poupart's ligament. If we were to pierce the abdominal wall with a long needle, at the point where these lines intersect, we would most probably transfixed the ovary; now it is precisely in this spot that the sufferer refers the pain; and it is fixed, that in all these patients the
same place is referred to as the seat of the pain; hence we regard the pain as being situated in the ovary; and it tallies with the result of palpation, namely, that if the hand is pressed downwards in the direction above indicated, when we have overcome the resistance of the muscular varieties which is sometimes great, we come upon the bony of the pelvis; and then we are able to discover a rounded body, which is sometimes large, and sometimes smaller. Further, we find that the pain experienced is a peculiar one, and shoots up to the head; and the patient will tell us not to press hard upon this oval body, for she knows from experience that this is the seat of the pain which, radiating in an upward direction, is the precursor of a paroxysm; and constitutes in fact the Aura hysterica. That it is not due to pressure of feces in the colon, is shown by the fact that it persists after thorough evacuation of the contents of the intestine; and moreover by the fact of its sometimes occurring on both sides. When the pain in the ovary exists in the left side, we have anesthesia of that side; and when in the right, the insensibility is
upon the corresponding side; and in some instances the pain is present on both sides and we find the anesthesia affecting the whole or nearly the whole of the body.

Nor, as regards the cause of the hemorrhage. We find it in certain cerebral lesions which affect the posterior part of the internal capsule, whether from cerebral hemorrhage, chronic alcoholism, or lead poisoning. \[The internal capsule\] is external to the thalamus opticus; and is formed principally by bands of white substance, which are simply the prolongation of the lower stage of the crus cerebrum; these proceed to expand in the centrum ovale to assist in constituting the corona radiata Reil. A case in point came under notice at the Hôpital Salpêtrière a few years ago. There was profound coma, partial right hemiplegia, and complete right hemianesthesia, and there was no response of any kind to stimuli applied to the skin. On the left side, both motor power and sensibility were retained; and there was no appreciable difference of temperature between the two sides.

Death took place the day after the attack; and there was found a recent clot in the left hemisphere, taking a linear direction.
from the anterior extremity of the caudate nucleus is about four centimetres from the posterior part of the occipital lobe. It involves the whole of the Rolandic Reil, as well as part of the lentiform nucleus of the Corpus Striatum, the caudate nucleus, and of the thalarnus, were free. Prof. Charcot, at that time, showed the longitudinal form of the clot, as being determined by the direction of the bundles of nerve fibres between the lentiform nucleus and the "external capsule".

We may compare absolutely the semi-anesthesia of these lesions to the semi-anesthesia of hysterical patients; for it is frequently made to disappear by the same superficial means, by Electricity, Magnetism, and Metals, as in the hysterical form. Prof. Schiff, of Vienna, has quite recently performed some experiments on dogs, and has given an account of these in the "Progressus Medicinae," and, without recapitulating this report, we may here take his principal results as bearing upon, and supporting this view. By irritating the part of the brain indicated above, he succeeded in producing anaesthesia of the limbs, and by applying a galvanic current to the animal's skin, again for a time restored the sensibility. And in Hysteria, we must remember that...
though it appears and disappears, yet the semi-anesthesia is the most lasting of all the symptoms. Hence we may conclude that in the semi-anesthesia of Hysteria, we have a functional alteration of the same portion of the brain.

In cases of Cerebral hemorrhage etc., involving the thalamic or parts adjacent we usually find a hemiplegia affecting the limbs, the trunk, and parts of the face opposite to that on which the lesion of the brain exists. There is also vasomotor paralysis shown by the increased temperature of the hemiplegic side, and it is only in some cases that there is loss of sensibility at all; but in the following case, which we had under our charge some months ago, we have an example of Cerebral lesion where vision, and hearing, at least were affected.

A man, aged fifty years was, while at work taken suddenly ill, and was removed to his home, he was not then unconscious, but was unable to stand. He complained of pain on the right side of his head, there was diminution of vision, of which he complained very much, and of "a pushing in his head". There was left hemiplegia when we saw him; but the skin was quite sensible. On
the following day at the time of our visit, he was asleep; he had slept soundly all night; and we had great difficulty in arousing him to answer questions; we had to speak very loudly before he could hear; he could not see objects at any distance; he could not see the limits of either side; and the sensibility on both sides, was very much diminished. The temperature was then slightly below the normal on both sides; and he still complained very much of the pain in his head. The following day, he was so insensible that he could not be roused. Sensibility, both ordinary and reflex, was absent; and yet his breathing was not tertoronic. Both pupils were partially dilated, and did not respond to the light. In the evening he died, but as we did not see him again, and as the friends were ignorant people, we could not learn the exact condition immediately preceding death. But that he had died in much the same condition as when we last seen him during the day. An examination of the brain which was all we could manage, revealed a large clot, which appeared to be of recent formation, and which was found occupying a place in the white substance of the upper
part of the brain on the right side. Posteriorly it reached as far as the Corpora Quadrigenia and anteriorly to about an inch beyond the Anterior Commissure. It did not extend upwards to the surface of the convolutions but below, the cerebral substance was much broken up. At this stage of the examination we were disturbed by the impurities of the friends and had, very reluctantly, to desist from further investigation; still I consider that there was sufficient to show in this case that the anaesthesia, which we observe in hysteria, is also seen in cases of cerebral ischopeny and that in addition a paresis, a paralysis, of special sense may also occur. What have we then as liable as to differentiate between purely functional irritation, so-called, as seen in Hysteria, and the cases where the same symptoms are due to haemorrhage, etc.?

The age of the patient cannot be considered for Hysteria-Epilepsy may occur at any age in the female; and neither occupation, nor the circumstances attending married life have any effect in preventing the occurrence of this affection. One symptom which has been stated by Prof. Thedest Diseases of the Nervous System (Vol. II) as showing...
encephalitic lesion is a rhythmic convolution, which occupies one-half of the body, including the face in many instances, which has the appearance of the jerking movements seen in chorea; sometimes that of the tremor of Paralysis Agitans. Last I have at present a case under observation, of a young girl in whom all the symptoms usually referred to Hystero-Epilepsy are remarkably well seen; in whom these very jerking movements are present, sometimes for hours at a time; and the only difference we can perceive between such a case and one of Mr. Bharati's, at least so far as this agitation is concerned, is that in our patient it only comes on when she is unconscious. Besides, we must remember that the same thing, or something very like it, occurs in children suffering from intestinal worms, of which, too, we had a very good example, in a boy about ten years old, who was cured of what had been called Chorea, by administering an anthelmintic; the movements were certainly very like those of Chorea.

What, however, may assist us in distinguishing such cases of anesthesia in Hystero-Epilepsy, from those in which it is
due to grave cerebral lesion in the presence of
paroxysmal hypertension, which was never
missed in well-marked Hysteria-Epilepsy,
and above all the primary paroxysmal
symptoms. Further, we have an element of
diagnosis in the electric tests which we
conducted in our patient M.
We found that in the first trial of the gold, we
were successful in producing sensibility when
with a stronger current from a battery we
produced its effect; and we could not under-
stand this at the time. A much stronger
current still did act, and that very quickly.
The current from the gold was, when measured
per small, indeed we could scarcely get an
indication of its strength upon the face of
the delicate galvanometer. Now these facts
were supplemented by others. We measured
the amount of "resistance" in our patient,
its galvanic current. At the wrists,
where there was a good circuit, and with
all possible precautions, we measured the
resistance as 142. As time passed on,
and our patient became anaesthetic for
much longer periods, and having very
short intervals of relief from it, so
were much stronger currents required to
replace the sensibility. It is also to be noted
here, that having no previous experience of
the amount of resistance offered by such
patients, we could not possibly give the
patient any notion of any expected amount
of resistance; we did not know whether it
would be greater or less, than in health;
we have since this, of course, observed that
in every similar case the resistance is
very great.

After a time however, (and we must
remember that she was taking chloride
of gold, the action of which we will consider
afterwards), the anesthesia gradually attacked
her less suddenly, and not oftener than
done, or twice, a week; and that she was
far from it for long periods; and again
when she lost the power of speechlessly, she
ceased to move, and it was always restored by
the application of the continous current
of the battery. Very recently, and after
having enjoyed good health for ten
months, we have a repetition of these
experiments, and with such a result as
we had expected, namely, that the
resistance offered to the current is very
much reduced, and, instead of 142° at
the orrisk, we have now only 30°, an amount
which is perfectly registered in persons who
Consider themselves in good health; although we have stated in the relation of the case, the usual "resistance" measured in healthy persons is from 5" to 7". It has been shown in some of these patients that by the application of the metal selected, galvanism, to the affected limb, there is restoration of the sensibility on that side; but the opposite, previously normal side, rendered anesthetic; and it is termed the "phenomenon of transfer". In the present instance, however, it was not so: sometimes the anesthesia was on both sides, sometimes only one. When it was double, the galvanic current restored the sensibility on both sides; and when only one was affected, the opposite side was not paralyzed by the restoration of this one. In the report of the case alluded to we have omitted one incident.

The morning this girl was unable to speak but was sitting in bed sewing; her attention was aroused by hearing a scratching sound (she was then only deaf on the left side) a mouse hopped across the floor, and this so affected her that she screamed and called her mother; for here, as she thought, unable to move from bed, she was afraid the creature
sioned jump upon the bed. She was however quite pleased afterwards, when she found the fright had renewed the power of repeating. This was the first time it had been restored without the application before mentioned and she requested her mother and others to frighten her some time again, when she was in that condition. May as well give the sequel this at this place, namely, that the occasion for the frightening action did occur again in a day or so, and that every member of the household tried in turn to frighten away the anaesthesia, but failed signally, much to the patient's disappointment. And the amusement of some few of her friends. I may go into detail so far as to say that her father once entered her room feigning all the appearances of mild intoxication, with a stick threatening to thrash her for deception, there was no motion, for she kept a good deal at the notice of the castigation, but no effect was produced upon the anaesthesia. As I take it, it is in evidence, to put forward the theory of insectivorous attention so strongly, in account for all the phenomena of anaesthesia, and there is no doubt he has grounds for his assertion in a few instances. He notes the instance of bread pills producing urination, when such action was looked for, but
would he argue from this that Epsom Salt, or
broth oil, would not purge, unless there was
such a result expected? If ever there was a
piece of evidence brought against the theory of
expectant attention, which is after all only a
phrase, it is in this last experiment of our
patient's own, who argued from her experience,
that a good fright would at any time restore
it.
If we could have measured the electric resistance
in this patient at the first, there is little doubt
from the course of the disease, that we would
have found that it was not very great, for
the small current from the gold a short
period after her first attack (three days) was
efficient to restore sensibility, and at this time
the ovarian hyperesthesia, and pain in the
head, more what I may term, at their height; that,
was time passed on, and the resistance became
greater, so the hyperesthesia diminished in
intensity, and at last disappeared altogether,
and from this time, also, the sensibility
became restored, and the electric resistance
approached more to the normal; consequently
we see a corresponding ratio kept up between
the Anaesthesia and Hyperesthesia, which
shows that these two symptoms are very
closely related; and that when the one was
most intense, the other was present in its least degree, and vice versa, and with a return to a healthy state they both disappeared.

Although the treatment of this hemi-anesthesia by new metals has been replaced by other agents, it is still instructive to notice the part played by them. It was thought quite inexplicable that one metal should affect the sensibility, while others failed; and it was put down to a specific action of the metal, but as we learned to produce the same results by electricity and magnetism it began to doubt the specific nature of the metal. Nor, in testing with these metals, we found that some currents were stronger than others, that from copper feeling notably very strong, in comparison with them, and the current from gold was extremely weak as we have already seen; and easily conclude that the action upon the body is an electric one. For instance, in the case already gone over, the gold acts at first in a few seconds, and at that time, we found a current of the same force, from a battery produced the same result, when a stronger one would not, but that this stronger current was afterwards
spectacular, when the application of the gold for hours had no effect. By a symptom or had presenting itself we could almost measure the declining action of the gold as the case progressed, which was, that first a tingling sensation was produced in the skin, exactly like that produced by the very weak electric current from the battery; and this tingling another time only left a "benumbed" feeling in the skin when it was applied, and lastly when the stronger current was required to affect the patient. Half-a-dozen sovereigns were kept on for hours, without the patient experiencing any sensation whatever in the part, nor restoring the sense; in this testing we refer more particularly to the application of the gold to the skin for the purpose of restoring the voice, when also, the skin at that part was not anaesthetic. We shall return to the theory of "Expectant Attention," and the cause of hemianesthesia, after noticing some other symptoms. We may now direct our attention to the impairment of vision or hysterical "Daltonism," as shown by the hysterical "Daltonism," which is commonly observed in some of these
patients, and which has been termed achromatopsia. On account of circumstances connected with the patients, we have not been able, unfortunately, to examine opthalmoscopically more than one patient out of four in which this phenomenon was present. In this one (the frequent examinations were made revealed no morbid condition of the retina, or other part of the organ of vision, at any rate so far as our experience in such matters extended, which was not inconsiderable: (this statement is made parenthetically, on account of the purpose for which I give our evidence). This negative result of examination with the opthalmoscope, tally exactly with what has been reported by various observers of the phenomenon of hysterical achromatopsia. Moreover, at that time, in the absence of an explanation of the effect, we should only have been too pleased to have discovered some organic change to account for it.

Not to recapitulate here what is already known of the mechanism of vision, we will only name the colours received in the order in which they are produced. The most simple colours are red, blue, and yellow. The mixed colours are
Orange, green, and violet; and this is the order in which they are seen. Of course the colour vision, as we know, differs widely in different persons; some perceive one colour more than another, while others are colour-blind, it is termed, and throughout life cannot distinguish one colour from the other; although there are some instances recorded, of persons being colour-blind for many years, and yet having gained the perception of different hues, at some period of their lives.

In our hysterical patient we found, that the exception of the colours came, and went, in a regular manner. At the time we first noticed the loss of vision, she said everything placed before her left eye (the right being blindfolded) as black: a sovereign was held to the left temple; she first perceived red, and every object appeared red to her; the next colour seen was yellow; the next, blue. Then, on being shown an orange, which she had previously related to be a ball of black yarn, she immediately told us it was an orange; she next perceived green; and lastly mauve. On another occasion, while we were testing her otherwise, she said my dress is mauve—coloured I know, but it looks green to me now.” Then it became orange; and, as our attention was directed to this, w
found that this colour next gave place to range, then blue, yellow, and lastly red, exactly the reverse order in which they were required; for, in losing the perception, the first to disappear was violet, and the last, in the return, red was the first to be seen, and the last, violet. In two other patients the first seen was blue, and in one the last yellow; both perceived was red. There cannot be any deception in these cases; for, even if they had been educated persons, and had been conversant with the colours of the solar spectrum, in the first case, at any rate, the colours were not perceived in the reverse order; and further, there is a constant order observed with all these patients.

For found, when this phenomenon presented itself, that we could make it disappear by the application of gold. Now, as in the anaesthesia of the limbs, the metal required to be kept applied for longer periods each time it was tried, until in the end it had no effect. But once placed on the more powerful current from the battery. As it did not depend upon a recessed state of the optical apparatus and the sense of vision, colour was regained by the same means as the anaesthesia was displaced, we are bound to admit their
connection; and that they depended upon the same cause. The senses of smell and taste were also lost; so was the hearing on the affected side, (the latter also changing to the right side occasionally along with the dechromatopsia); and there also were required by the application of the same agent, and at the same time. The cause must have been the same in all; in fact, they were only portions of the general anaesthesia; and we can thus trace the cause to the same part of the brain. Even so far as our knowledge of the anatomy of the brain goes, we can trace fibres of the glossopharyngeal, olfactory, auditory, and optic nerves to the neighbourhood of the optic thalamus.

Of all the important phenomena of cryptic epilepsy, and which collectively form the disease, there are two which are nearly constant in their relation to the anaesthesia, already considered; these are, contracture, and hyperesthesia; and we will take first the latter, under the name of Ovarian Hyperesthesia.

This symptom makes its appearance at the very first, long before the first acute paroxysm of the
hysteria presents itself to the terrified gaze of the patient's friends.

We have already gone over the reasons for considering the pain in the iliac fossa as proceeding from the ovary. When the patient is quite conscious, and we press down upon the ovary, she complains of pain, which is of a peculiar nature, and which is characteristic. It is a complicated sensation, and the patient will tell us that that is the spot where she has felt the pain so often; at the same time, we find that it radiates to the epigastrium, and this constitutes the first mode of the Acute Hysteria. From this it passes to the region of the head, causing increased action, and a corresponding excitement of the pulse. It then passes upwards towards the head; there may be a sensation of a ball rising in the throat; (the globus hystericus) this is the second mode of the Acute. There follows a rushing sound in the ears; and the pain flies to the head; dimness of vision ensues, and this may be termed the third mode, in so far as it is distinctly related by the patient that she heard this rushing noise and everything was dark before the
lost consciousness; the annihilation of the senses, shown by the unconsciousness, being the termination of the Aura. This is the course taken in most of these cases of Hystero-Epilepsy, but there are some in which it has a different position, at least in the "first note" of the Aura. These others have points in which the Aura commences in the parts of the body, such as the top of the Sacrum, some of the dorsal vertebrae, and the intercostal spaces. We have at present a woman under our care who has Hystero-Epilepsy; by pressing in the ovarian region, and in the dorsal vertebrae, we will determine a paroxysmal attack; and by again pressing the same points, we can immediately control and shortly stop the convulsions. The same mode is the explanation of this phenomenon; but terrible as this, we may profit by a glance at the symptom which, through several centuries, attracted so much attention, namely, Hysterical Contracture. This usually accompanies the Ovarian hyperesthesia.
but may remain after all the other phenomena of hypsersphilepsy have disappeared. It appears to be a
rigidity of the muscles, not being a contrent contraction of these, nor yet a paralysis. In our patient M. it
usually assumed the hemiplegic form; but sometimes we noticed the right arm was contracted along
with the left leg, or vice versa. This contracture differs entirely from the paralysis due to cerebral lesion
in the following facts: — We have no facial palsy; and there is no paralysis of the upper eyelid; the
tongue also is protruded in a straight manner, and not pushed to one side, as it is in ordinary hemiplegia.
Again, in this hysterical contracture, we have the anaesthesia very often occupying the same side of the body; whereas in
bcrbral lesions, the loss of sensibility is usually on the side opposite the hemiplegia.
Also, this contracture shifted about, as we saw in our patient; for
on one day the upper extremities were affected. Above all we must look
to the fact, that when we have this peculiar
contracture, there are always constant symptoms which enable us to diagnose it as hysterical contracture. These include the hysterical paroxysms which occurred at first. The existence of ovarian hyperesthesia, and the fact that it can be made to disappear by the application of the galvanic current, with the other phenomena of the disease, which we have already noticed. It is peculiar also that the contracted limb, cannot, if in the position of extension, be flexed; during sleep, it continues in the same state and can only be partially overcome by putting the patient fully under the influence of Chloroform. It may be recovered from, on the occurrence of any strong emotion, such as fright, sudden pain (new etc.) and, on the other hand, it may be permanent. However, except in very long-standing cases, there is no atrophy of the muscles observed, and their electrical contractility is usually preserved.

As regards the compression of the vagus, being the means of stopping the hysterical paroxysms, there can be no
Hyperesthesia and contracture, with the phenomena of anestheisia, the fact that by certain metals, magnets, or electricity, we can reproduce the same condition, on the opposite side of the body.

In **Conclusion** we argue that in the Hysterico-Epileptic patient, we have to begin with, a certain Anesthesia, a hereditary predisposition to disease of the nervous system, and to a certain portion of that system, that may exist throughout life without manifesting itself; but in such a patient, any cause supervening to give rise to a debilitated state of the body, places her in such a condition that any strong emotion will determine the Hysterico-Epileptic attack.

Also, as in some of our observed cases, if any organic disease be present first, and the anemic state be induced by this disease, then its symptoms will be rendered obscure, or at any rate difficult to differentiate, by the presence of the Hysterico-Epileptic phenomena.

With regard to the actual seizure
and after-phenomena we find:

1. That there exists in the brain a centre of morbid action, which is fairly well defined, and part of which we have noted as the "Capsula interna". That the first cause of the hysteric phenomena is an irritation of this centre, which results in irregular distribution of the nerve force to peripheral parts of the body; for example the ovary, and the muscles; that a further reflex irritation from this towards the centre again, takes place through the sympathetic nerves; and the centres of consciousness, and external impressions are in turn affected; and the outcome is a convolution of the body, which lasts until this irritation has subsided, temporarily, or altogether, and in the same way as the pain produced by a decayed tooth will last until the extraction of the offending member. The contraction which is present is caused also by the irritation of these centres, transmitted along motor fibres, causing contraction of the bowels, muscles of the extremities, and bruxism, and diaphrengia; the latter
being due to contraction of the muscular fibres in the arterial walls. It may be said to be an accompaniment, (in all the cases to a certain extent) of the hyperaesthesia. The hasty spasm of the muscles, during the paroxysm, is of course quite different from the more permanent contraction, and appears to be due, as in Epilepsy, to the irregular discharge of motor force from the Centre; it is as if it were the first outburst of the storm.

That this irritation in turn gradually fades away, and gives place to exhaustion of these nerve centres, is necessarily not Have then loss of power at the periphery. This we see from the gradual dying out of the hyperaesthesia and its replacement by the anaesthesia.

That the course of the disease can be considerably modified, if not cured, by the internal administration of Potassic Bromide. But by this means we are certain, when we use magnetism or electricity, and that by no means should we entirely discard
the internal treatment by tonics: and the beneficial action resulting from the internal administration of gold, (as in our case) etc., is explained, in some degree, by the fact that it acts generally, as a tonic, or strengtheners of the system, as shown by the return of the batamnia.

That the "resistance" shown by such patients, (while Anaesthaein is present), to electricity, demonstrate a paralysis of those nerves which carry sensation, a further dulness at the centre; because the muscles are slow in being affected by the current, which showed he passed forward, along motor fibres, from these centres.

That compression of the ovary, or other region, stops a paroxysm, is proved. That it does so by acting as a counter-irritant at the periphery, while the brain centres are in this state of excitement: and, frequently, by irritating these peripheral regions, we can transmit the irritation back to the centres, so as to give rise to a fresh paroxysm, and a "shock" from a galvanic battery.
That the disease is curable by such means as have been described, as by the internal administration of certain mineral tonics, and by regular application of electric or magnetic currents.

That it is important to recognize the gravity of the case at the very beginning, so that we may be prompt in applying our remedies; and it is certain, that if we can, at this time, get a rapid cure, whereas the disease unchecked, or aggravated by a treatment which springs from ignorance, may go on until the unfortunate sufferer dies, or, worse still, is sent to a lunatic asylum.

Lastly, as showing that the theory of "expectant attention" will not account for all the phenomena exhibited by these patients, we have some facts which, to us, appear conclusive, as being opposed to it. Although in some patients...
There is certainly evidence of its being a factor to some extent; we have had one patient, who was at one time a hospital nurse, she is what some would term 'hysterical'; and in her we can produce a state approaching insensibility by pressing upon the spine; she believes the spinal cord is diseased, and she says she knows it is a very serious matter and believes the cord can be "put into a fit" by pressing on the spine; we find in her that pressure exerted elsewhere has no effect whatever. But, apart from such examples as these, we find in most of the true cases, that there is no anticipation of results at all. For, in pressing upon the ovary during a paroxysmal attack, the patient, being unconscious, has no notion of the result; nor does she even possess any knowledge afterwards, of anything having been done to her. We have, further, the fact that the colour-blindness comes on without the patient, or her friends, discovering it for some time, and that there is a regular order shown in the reproduction of the colour perception.
which it would be impossible for an unaced person to feign; and the proof lies here: that she cannot at first perceive the colours, but as the achromatopoeia disappears she names the various hues correctly.

We certainly admit that the phenomena produced by physical agents appear sometimes to be produced by physical agencies, but it is not so invariably; we also admit that the same results appear to be produced sometimes without any effort, either on the part of the patient or her attendant; a notable example of such is given by the late Prof. Langdon. Where a woman who had been "paralytic" and bedridden for years, suddenly jumped out of bed one morning. We must not however give in altogether to the notion that there is always some physical agent at work. Even in these examples there may be a physical agent at work; for although we are not yet very far advanced in the science of electricity we know that currents of electricity can be produced by inequalities in temperature.
and it may be that such currents are at times produced in the body, and they would have the same effect, as they would if derived from a galvanic battery external to the patient.

It seems a pity, that when we come upon facts which we cannot explain by what knowledge we possess, we should give way to that egotistic feeling which prompts us to set down all these strange phenomena, as chimerical fancies of the patient.

Our progress must be slow and steady in the investigation of new facts in the physiology and pathology of the very intricate machinery of the human body. We must often stop, in our advance, and retrace our steps, to see that we are sure of the ground gone over, and are certain, by such steady advance to grasp more and more the secrets of Nature; by the earnest study of the phenomena which present themselves to us, to discover the mechanism by which they are produced; and through this again, to be guided in our endeavours to alleviate human suffering.