Epilepsy. D. S. T. F. Quinn.

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Thesis on Epilepsy -

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In the selection of a subject for a thesis, the greatest difficulty is involved, as much as I am concerned, for my practical knowledge is so limited, and circumscribed, that I cannot venture to offer any remarks or ideas gained by my own experience; consequently the facts contained in this paper will be a resume of accounts handed down by authorities of undisputed and unquestionable dispute, gathered by lifetime, entirely devoted to elucidate the mysteries and overcome the many difficulties which are constantly staring the paths of the Medical Profession. The hand of time is forever clearing the
must which hangs so gloomily in the distance, and大臣, the exuberance of man penetrating too deeply into the obscurity which pervades the culminating point of the intelligence, which is his innate ambition to arrive at its end, as he follows in the march, the horizon is equally as far, and the ground to be travelled over equally as long and weary. But never the less on he pushes with full determination to scale and eventually to gain what he concerning to be the highest pinnacle of earthly knowledge and science - notwithstanding the insurmountable obstacles, which constantly present themselves and for a time slacken the speed of his all absorbing theme, until vigilantly he awaits, another opportunity is afforded when with fresh stimulus he again starts to gain the much wished for, till for distant fast -

The foregoing remarks may very accurately be applied to the subject which out of numerous others I have chosen for your perusal, as my dissertation for graduation - Immemorial are the
cases of Epilepsy which are daily presented to the notice of the Medical Profession, and as innumerable are the methods proposed for its permanent cure, scarcely is there a drug inscribed in the Tables of the British Pharmacopoeia whose efficacy has not been thoroughly tested with a view of arriving at some definite and decisive remedy for the alleviation or cure of this terrible malady - other means have likewise been devised for the same end, but of the different modes suggested, their value has been short each in turn has fallen into disrepute, their actions being for the most part wasteful, and their value calculated according to the effect produced by them - the appellation by which the disease is recognized is by itself sufficiently significant to interpret the rapidity of its seizure. The term Epilepsy is derived from mania, a seizure, an abrupt invasian - so sudden in its attack and so fearful and unwholesome the accompanying scream, that it was looked upon, and considered by the Ancients an.
an evidence of the number of Demons, or as a just retribution for transgression of the laws of their gods. In no place can any tome in the Paediatric be found to contain inversion, for generally without the least warning, a scream is heard, darkening he falls to the consternation and fright of the surrounding Crowd.

Epilepsy (falling sickness or fit) is a disease the principal symptoms of which may be said to be sudden loss of consciousness and insensibility with Chrone of coma or contraction of the voluntary muscles usually followed by exhaustion and coma which correspond as a rule in their intensity to the severity of the fit. The attack recurring at intervals, which become shorter as the disease continues, so that a patient who at first had a fit in a month or two may have as many as ten or twelve or more attacks in a day.
Warning. The fit comes on as a rule in the majority of cases without any peculiar symptoms, or warnings, sufficient to make the patient aware of its approach, but in some cases he is able to tell when he is going to have a fit. Gorgé states that these premonitory symptoms only take place in about four or five percent of the epileptic cases. This I believe to be far below the average. These warnings differ very much in their character and also in the length of time that elapses between them and the attack. In some cases, the time being too short for the patient to take advantage of it, so that he is unable to get off his horse, or move away from any dangerous place as a fire, precipice, or the water, edge etc. At other times or in other cases it has time, but perhaps barely time to get out of danger and in other instances again many minutes or even hours may elapse between the warning and the fit. The characters of these warnings also vary very greatly. It often consists in some unnatural state
of the mind, feelings, temper, &c. He is judged
cross low spirited, timid, or dull; or on the
other hand may feel very strong, hearty, and
cheerful. Again there may be some change
in one or more of the natural functions, on
of the Bodily Sensations. He loses his appetite
or his appetite becomes weaker. A first few
of wine taken, place, he shall feel its smell, or
awake of a strange taste. He sometimes
in our Hypothetical condition, and more speedily
heating before him (Musca Volitantes) but
distinct forms of persons and things not
present. This however is not very common,
but it certainly happens in some cases.

G. Gregory was assured by an Epileptic
Patient of his - that when he had an
Epileptic Fit coming on - he fancied he
saw a little old Woman in a Red Cloak
advance towards him, and for him a
flow on the head, on which he immediately
lost all consciousness and fell down.

I was told by a Patient that just before he had
a fit anything that he happened to be looking
at seemed to assume different shapes and
then become misty and indistinct. Sometimes there are circumstances that are claims to a Psychasthenia. Flashings of the face, blinks of the eyes, tremors of the hands, difficulty articulation, vomiting. Of twenty one Epileptic, found by Joseph Stalker at Oldham, nineteen accommodated the paroxysm in some. The most curious, peculiar symptom of all except the spectral illusion is the Aura Epileptica. This is a sensation which is differently described by different persons, as a stream of cold water, or a current of warm air, or the creeping of an insect, or a spider. The sensation commences commonly at the extremity of a limb as a finger, or toe, or from some distant part of the body, or trunk, and gradually ascends along the skin towards the head; occasionally it gets no further than the pit of the throat and vomits or reaches the head or stops at the Epiasthenia. In other cases, the patient loses consciousness and the paroxysm takes place in some cases offensive or the muscles of the face from whence the aura proceeds.
place before the general state of convulsions. This aura has been thought to depend upon some change propagated along a nerve upwards to the brain, and to be sometimes connected with some injury done to or some impression made on an affixed nerve. Dr. Thompson used to say that he had known epilepsy to commence with an aura proceeding from an old cut in the side. In other cases the aura originates probably in some change in the blood, and is analogous to the numbness or tingling that is often felt in some part of the body in extremities immediately before an attack of Paralysis or epilepsy. There is no real inconsistency in this twofold explanation; the source of the aura may be Centre or Substance, as also may the exciting cause of the Paroxysm. There seem to be some likeness between the aura epileptica and the globus hystericus, except that in epilepsy the feeling generally begins in an extremity and reaches the head, while in Hysteria it commences in the stomach and ends in the throat—sometimes there
sensation, may be combined. The Pupils
may be more dilated and they pitch than usual
or one Pupil more so than the other, or
the Eyes may be rotated in a peculiar manner.
A knowledge of these warning symptoms is
of importance always, as far as the comple-
tative safety of the Patient during the attack
is concerned, for though they cannot always
be of use being mostly perceived when the
Patient has ceased to be able to control himself,
they sometimes give us a chance of putting
off stopping, or at any rate preparing for
the fit. It is as well to remember
that these warning symptoms sometimes
give a false alarm - they take place
and though no preventive measures are
taken no fit occurs.
Symptoms

The shapes and modifications of Epilepsy are so various, that it is impossible to give even a good general description of it. Epileptic Fits may be divided into two classes called by the French the "Grand Mal" and the "Petit Mal". The former is also spoken of as the Epileptic Fit, and distinguished by that appellation from the Epileptic Vestiges in "Petit Mal". In the Grand Mal is the most evident and most characteristic form of the Paroxysm, the Patient utters a peculiar cry, and at once falls down convulsed and insensible, or he falls without making any noise at all. The Cry may vary greatly in its intensity. The Convulsion are usually more marked on one side of the Body than the other. They drag the mouth towards the side which is the most affected, and twist the face.
in the opposite direction until the chin may rest on the opposite shoulder. They push forward the tongue and clench the teeth upon it. They clasp the thumb upon the palm and hold it there with a force that seems to be more than muscular. They raise the walls of the chest and abdomen, and put an end to the movements of inspiration. They stiffen the limbs, so as to make it very difficult to bend them. In some instances, they may take hold of the bladder, bowels or seminal vessels, and expel the contents; in others, they may be so violent as to bite off a large portion of the tongue, break the teeth, or dislocate a limb. At first it seems as if the muscles would never relax, but afterwards the contractions are separated by intervals which grow wider as the paroxysm draws to an end. The convulsions that is, to say, an Ictus or fit; fit is fit. Chonic afterwards. At the instant of the fall, a corpse-like motion overspreads the countenance; a few instan
later, and the whole appearance suggests the idea of a Person {struggling under the bows of an invisible sheet} as often the original paleness rapidly changes into livid blueness, or even blackness, the head and neck become frightfully heated, and then are hissing, grumbling, chucking sounds in the throat which shows our clearest that the Patient is in the actual theme of suffocation. At times, however, the signs of suffocation are absent, and the ghastly paleness of the beginning is retained throughout. When the fit is at its height a quantity of foaming saliva is usually blown or spewed from the mouth, and if the tongue or cheek has been bitten, the saliva is not infrequently reddened with blood. If the Eyelids are open, the eyes seem to be projected or distorted with its Pupil dilated to the utmost, and absolutely insensible to light. As a rule, however, the Eyelids would seem to be closed, and well it is that they are so, for it requires some move to meet the ludicrous state of the
Epileptic Eye. - The eyes are not always projected for they may quiver and roll about, sometimes they are turned upwards, downwards, or laterally, so that the Cornea cannot be seen of the White Sclerotic only is visible. All this while it is usual for the hands and feet to be cool and coloured with clammy perspiration. Except the head and neck, indeed the whole body is cooler than natural and if the head and neck are warmer than the rest, it is merely because the vessels are more distended with De mondo blood.

The other and less obvious features of the paroxysm are in keeping with these. At first the pulse may be almost absent, and the action of the heart very feeble, but if the finger be kept on the wrist, and the hand placed on the bosom it is found that the pulse may rapidly acquire a force and fulness which it never had in the intervals between the fits, and that the heart will beat tumultuously and with great violence when the pulse arises. In some instances however
the pulse may remain almost silent and
the action of the heart very feeble from the
beginning to the end. From the very first
all consciousness is happily suspended and
the most powerful stimulants fail to evoke
any sign of action in the dormant mind.
The water which may be poured on the
face (with very few exceptions) causes no
thinking in the open and staring eye; or
the fire upon which the patient has
fallen may clear the flesh without causing
a single spasm. After continuing two or
three minutes the convulsion cease, and
she is left with all his muscles unmoving
like a person dead drunk, or struck down
by apoplexy. The lungs are longer retained
by the aspersion of the earlier part of the fit
resume their play with a deep inspirations
and then act with loud and ostenious
breathing; and as they do this, the veins of
the head and neck become unloosed, the
natural colour returns to the surface, and
the pulse to the arteries, and last of all, the
patient wakes to an obscure and troubled
consciousness. His first feelings are those of fatigue and surprise, his first words are expressions of suffering. The time during which a patient lives after a fit varies, it is very rarely more than half an hour or an hour, and it may not be more than two or three minutes. This is the usual but not the invariable course of the fit. Indeed the attempt of rallying may be imperfect, and fit after fit may occur for a long period without any interrup:

...."of waking, or rallying may be prevented by death. After waking there are generally some symptoms of reaction in the circulation, not well marked in simple epilepsy. There may be enough to give a dull flush to the cheek, and a little fulness to the pulse—for a short time after waking—but then clear as a rule when the coma ceases, and the coma is never much prolonged in simple epilepsy. Usually his headachy and exhausted, listless, moody, irritable, until he has had a good sleep. The faded countenance also tells plainly of
the struggle, even though it may not present those numerous acts of coin and man about the eyelids and forehead which are unusual signs of a severe attack of Epilepsy. At this juncture, the intellect facies becomes more and more imperfectly and more distinctly and at last this habitual state may be one of pitiful patience from which no single ray of the Divine Principle breaks forth. Or the weakness or irritability which follows the attack may become more and more masked, so as to terminate in attacks of downright mania; or symptoms of paralysis may make their appearance, or death may happen in a fit or shortly after. The natural tendency of Epilepsy is Dementia, and Dementia is its doom, if the disorder is not checked and life prolonged sufficiently. At the same time, it is possible for an Epileptic to have many fits, and live many years, without losing the powers which are necessary to make him an agreeable and useful member of society. Death is caused by Epilepsy, happens generally from exhaustion.
in the period of probation immediately following the fit—

In the slightest form of the malady (the Petit Mal - Epilepti Ortico) there is any slight and transient or no convulsive attack. But in some instances, the whole frame may be agitated by one or two violent convulsive shocks. He pauses suddenly in the midst of what he is doing, or saying; his countenance becomes pale and blank - his limbs cease to play - and after a momentary feeling of coldness, he is himself again. His memory has kept no record of this odd passage in his history. In addition to these symptoms, a lurid flush may succeed to the paleness of the countenance, the vein of the neck and forehead may stand out in more prominent relief. The face may turn to one of the shoulders, and there may be some convulsive twitching of the face &c. There is no scream, fall, or bitter tongue, no foaming at mouth.
I observe ptyalism at the throat - some stifling and slight moistening of the mouth with saliva. This state of ptyalism, and obvious and partial opsony, may be followed by more or less fatigue, or loss of memory, or confusion of thought, in depression of spirits, or irritability of temper, and at times it may end in dreams or sleep. Generally recovery is almost instantaneous. Esquirol says: "il est des acres dans lesquels on nommee par la perte de connaissance" and Vespucc directs particular attention to such cases. These cases are very rare or at any rate difficult to detect, if we have only the Patient's statements to rely on. J. Radcliffe mentions a case in which the Patient did not lose either sensation or hearing, but his sight was troubled so that he could not see distinctly. As these affections are so different in degree and in some respects so dissimilar in kind. You may ask if they are really constitute the same disease. And they are essentially if the same terms we have this evidence that they
both occur in the same Person. Sometimes
a Person is affected with the Epileptic
kind of the fit, and gradually this fit worn
and worse till he has epilepsy in its severest
form. In the two may intermingle—sometimes
the mildest, sometimes the severest form
attacking him.

The periods at which the paroxysms return
are variable; occasionally the Patient dies in
the first fit, or he may recover from it and
never have another—then occurrences are
very rare. More frequently long intervals may
take place between the fits. Most com-
nonly, he is attacked at irregular inter-
vals of a few months, weeks, or days; sometimes
every day, or night, and not unfrequently every
time, in the 24 hours. The simplest form
is the one that generally occurs so frequently.
Sometimes, they occur at regular intervals,
but they are generally uncertain and irregular.
At the commencement of the disease the
fits generally occur in the night.
Diagnosis. In the first place it will attempt to point out the distinction between true and feigned epilepsy. Epilepsy is often simulated by Grandmalts in order to excite the commiseration of the public, so as to enable them to live comfortably in a state of idleness, either in their own home or else as inmate of some hospital or other charitable institution. It is often found abroad by some men to prevent their being drawn as convicts and both at home and abroad by soldiers and sailors who wish to get out of the army or navy. Notable girls will often feign epilepsy, as is sometimes seen in schools where one girl having been seen in a fit in a short time another will be attacked in the same or seemingly the same manner. Though one may not forget that some may be really affected. They cause hemorrhage of the parts of the head and mouth by faunery - the upper
strongly cause faunery by working a piece of soap about in the mouth - and lastly they
1. An Epileptic who has had no warning of the approach of an attack falls to the ground without any sign of exertion or struggle. Though Epileptic generally alone or crowded together, he is in the manner of falling. The patient chooses the scene, falls or as not to hurt himself — and though he takes a crowd, takes care if possible that there are no members of the procession near.

The loss of sensibility is complete and profound, great pain, fever and odours bad mire, &c., make no impression on the Epileptic. A genuine Epileptic is sensible to pain, and if it is proposed to applying the actual cautery, pour boiling water over his lips. He will soon kick a stoop to the pit, especially if you pretend to be about to do some astonishing to him.

3. This belief of an Epileptic during an attack is not affected by light. But this proof is still difficult as it is not easy to open the eyes of a person who is really convulsed; and then the ball is often turned...
to one part or the other so that it is difficult, if not impossible to see the Purpura.

One of the chief diagnostic signs is the Persorunce or Parkure of the Countenance which is soon dissipated and followed by palor when the Convulsions cease. It is impossible to imitate this change which is easily noticed by one who has observed Epilepsy. The Persorunce may be caused by pressing an elastic band round the neck, causing that part of the body to become much darker than the rest. A proper attention to the Patient will discover this directly.

By smell the Breath it will be known whether the foam is caused by vapor or not. The foam at the mouth of an Epileptic is often tinged with blood which is not likely to be the case with an imposter. The horrible Disturbing alteration of intelligence, the pungled expression. By of one recovering from a fit are difficult to imitate as also must be the strong and uniform action of the Heart.

The strength of an Epileptic far exceed that of a person, however strong, who simulates,
an Epileptic attack - so that a Person who suffers - may weak during a fit will give four or five strong Men a good deal of trouble to keep him down.

An Epileptic - cold and clammy during a fit, an Injurer will be found to be hot and sweating.

We must not forget that an Epileptic may feign an attack. In cases of Epileptic feigning a fit I have noticed that they contrast themselves with simulating the "Petit Mal" and do not attempt the severe form.

Of the several diseases for which Epilepsy may be mistaken. Hysteria, the principal, and by a careful attention to circumstances, in the diseases to be made - the total suspension of consciousness is not to be found in Hysteria as in Epilepsy. The Epileptic cry or scream is not to be heard in Hysteria - that is not to say that Hysterical Patients do not scream for they do so, but they do it often and not once only as in Epilepsy. The heavy sleep that follow Epilepsy.
is not common in Hysteria. Marshall Hall pointed out that there is possible closing of the alveoli and expiratory efforts which ensue the continuance of in Epilepsy, whereas in Hysteria the respiration is rapid and sobbing.

Uraemic Poisoning is to be distinguished from Epilepsy by attention to the following points. In Uraemia the urine is albuminous, and generally of low specific gravity, oedema of Face and Satunuries. The Pupil is fixed and dilated, and the breath may be ammoniacal. The existence of Renal Disease will also be discovered which will add to the ease of the diagnosis.

In Poisoning by Hydrocyanic Acid the diagnosis is only difficult when all the symptoms are present. The previous health of the Patient is to be considered as also the rapidly fatal result if a sufficient dose has been given. Epilepsy rarely causes death by its first attack. It may have been given to an Epileptic or if there are any suspicious whether, an Epileptic.
ought to be made. The time of death is also different in the two. If from Poisoning it may be a few, or immediately after a convulsion in Epilepsy it is generally from exhaustion after a fit.

From Apoplectic Convulsions - In Epileptic Convulsions the whole body is thrown into violent spasms, which are accompanied with intervals of quiescence, and often of partial return of sense. The breathing is laboured rather than obstructed, and the muscles preserve their tone even during the intervals; whereas in apoplectic convulsions, the spasmodic movements occur at the commencement, and are not repeated. Sense and sensibility are totally lost, the breathing is obstructed, and the muscles lose all power; so that the arm when raised and allowed to fall, does not rise like the arm of a Person recently dead.
Epilepsy may come on for the first time at any age - according to J. Bright the most common age is about 7 or 8 years or about the second dentition - and from 14 to 16 or shortly before Puberty. The first fit may not take place till between 30 and 50 years and in some cases not till after 60.

J. Bright says - There are leading periods in the evolution of this disease, and peculiar circumstances, connected with certain periods which may be considered as influential in the production of the disease - In Infancy, the Cerebral Organism is delicate and easily acted upon by various causes of irritation - Then follow the trying periods of teething - In a few years then the second dentition - In a few years later all the first changes connected with Puberty follow, the excesses and excesses of Manhood, and after the lapse of Years.
The progress of the system fails and man comes to perceive the nice balance of the constitution, the bonds often become sluggish, changes more or less obvious take place in the structure of the arterial and venous systems, and many causes, organic or functional which had before been unable to exert an influence on the vigorous frame, acquire power from its relative weakness. Morcan says all the statistics, relating to the time of life in which epilepsy has commenced differ little from each other, united and arranged in proper order we have them as our statement, with a total of 1995 Patients.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number</th>
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<tbody>
<tr>
<td>10 - 20</td>
<td>865</td>
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<tr>
<td>20 - 30</td>
<td>111</td>
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<tr>
<td>30 - 40</td>
<td>858</td>
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<tr>
<td>40 - 50</td>
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<td>50 - 60</td>
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<tr>
<td>60 - 70</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1995</strong></td>
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</tbody>
</table>
"The result of this table is that the age that is the most favourable to the development of epilepsy is from 10 to 20 years. In the second place comes the period of life comprised between the first two years and the eighth, and in the third place that from 30 to 40 years."

The causes of epilepsy may be divided into two classes:
1. The Pre-disposing
2. The Accidental or Determining

Pre-disposing
Hereditary causes. According to epilepsy is often hereditary, passing from Parent to Child, or sometimes from Grandfather or Grandmother to Grandchild, not as an accidental occurrence for it has been noticed.
in many families, and for many generations, in the same family. If we consult Harpin's work, who has made his observations over a large field, it will be noticed how incomplete the notices as to hereditary tendency are; but a striking fact is the existence of diseases of the nervous centers among the parents of epileptics, and also the large number of cases of mental ablation and epilepsy; this has led Harpin to look upon these conditions as predisposing. Mr. Bonnet and Cassauvelle found that among 110 cases of epilepsy 31 were hereditary, and of 321 cases of epilepsy noticed by Squire 105 were descended from epileptics in former families. An epileptic man married and had eight children, all of whom were epileptics; of these, one died at an early age and the eighth at eighteen years. Many authors have mentioned amongst the hereditary cases a great fight sustained by the mother while pregnant, and say that therefore the epilepsy was congenital; and it may be so, but often, though a woman has had a fight when pregnant and her...
Epilepsy becomes epileptic after a time. Thereby
the old, we are always justified in saying the fight
was the cause. I will mention three cases,
in which fights have been assigned as a cause.
1. A lady (while sleeping) was much frightened
at seeing an execution. The child became epileptic
at 4 years.

II. Two persons overturned in carriages, but
not hurt in any way. The child of 6, II,
became epileptic when about 11 years old. The
child of the other met the same. He was nearly 20.
I cannot think that these cases can be looked
upon as proving that a fight is one of the
hereditary causes. We are too ready to stretch the
point where we consider a statement to be confirmed
of our opinions, and quite as prone to shut our
eyes to anything that happens to be contrary to
them.

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Post. The result of statistics made by many
authors is that epilepsy is more common
in women than in men. If G. Francis
found that this was not the case, it is
said to be because his observations were made
on too small a number of cases. He states in Pracaos Medicinae praetexta vol i Part i that out of 75 epileptics 40 were women and 35 men, or at the rate of Women to Men. Squire in attempting to solve the question compared the number of epileptics at la Salpêtrière (Women) and at Bicêtre (Men) on the 31st of December 1813 and found that there were 389 Women to 162 Men. J. George finds the number of patients at the same places for the corresponding time in 1820 as 324 at la Salpêtrière and 162 at Bicêtre. Werthmueller states that the two cases before Patients are found to be equally common to the disease; but that after 47 years Women show a predilection to Stir lippey that is far stronger than in Men, and is about Two to One. Moriceau (in De l'étiologie de l'épilepsie) joins the same opinion. He says. If the number of epileptics is always greater at Salpêtrière than at Bicêtre Hospitals, that are devoted entirely to Epilepsy—then like all the nervous diseases in general Stir lippey attacks the Women more than the Men.
As to Constitution and Temperament acting as predisposing causes we have only some uncertain statements; it is true it is said, that a weak constitution and nervous temperament predispose strongly to epilepsy; but these conclusions perhaps are not taken from a sufficient number of cases. The following table are taken from Dr. Herpin's work.

<table>
<thead>
<tr>
<th>Tempérament Symphatique</th>
<th>13</th>
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<tbody>
<tr>
<td>Horvex</td>
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<tr>
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<td>Sangvin</td>
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<td>Miste</td>
<td>2</td>
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<tr>
<td>Non détecté</td>
<td>7</td>
</tr>
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</table>

8
Parchitiques

2

犁芜克尔米思, 威斯切利

3

Constitution tres pire

8

Conformation ordinaire

39

Belle conformation on peut compl. 10

Absence d'indications

6

68

The first table seems to point out that the nervous and sympathetic temperaments alone or combined are to be found most frequently amongst the epileptics. This result is confirmatory of the statements made by some good observers.

I. Todd considers Feble - Delicate and Irresolute People as predisposed to epilepsy. II. Required cites as predisposing the Melancholic Temperament, and weakened and cachectic constitution.

III. Toddle the nervous temperament. The complete absence of the Bilious Temperament will be noticed in the table. This agrees with those that state that
the predominance of the Gaster Hepatoce is more a morbid disposition than a true temperament and that this disposition does manifest itself in serious diseases and that it has not attracted notice among epileptics.

3. Partition. Has been named by many authors as a predisposing cause and has been placed in an important position in cases without any positive proof being brought forward of this assertion. Western mentions two cases in 1868 in which epilepsy appeared between 7 months and 2 years. In one case the child lived seven months without having another fit. The other became ill at 18 months, where dextinum is already well advanced. The second partition seems not to have (Hæfri) any more effect than the first, for we have no case between 5 and 9 years. M. M. Bouchet at Cayenneville do not mention dextinum as a cause and Lavaret gives only one case in one hundred and six.
Menstruation. From the researches of Bicari it
seems that phlebitis manifests itself most frequently
about the time of the first menstruation; but is the real
cause of the disease to be found in the influence of the
first appearance of the Catamenia? In males as well
as in females, the disease commences very often at
puberty. And from this we may infer, that it is not
probably in any difficulty of the first menstruation, nor
in any arrangement whatever of the nerves, that the
real cause is to be found; but perhaps in the general
resolution of the system that occurs at puberty.

Preceding Diseases. It is not easy to keep from
the common tendency to regard that illness that
has immediately preceded the appearance of phlebitis
as its cause. Medical men of all ages have
fallen into this error and consequently have looked
upon all kinds of diseases as predisposing. Without
falling into this exaggeration, we may rest on
the observation, made by Bicari (De Lamo) and
recognized among the real predisposing diseases, different
affections of the brain—such convulsions, or those
of an hysterical nature &—it is perhaps needless to
say that the presence of Semence, or Tabes, in
Excesses and Evil Habits. It is unquestionable that mental excesses and especially mania have been often noticed among the evil practices of epilepsy, but it is not proved that the former statement is correct. The same conditions of the organism that predispose epilepsy to the disease that eventually attacks them predispose them equally to mental excess and "vice versa," in which case the morbid state is at the same time the cause and the effect. The abuse of alcohol has also been pointed out as one of the causes.

Accidental or Determining Causes. Though the desire to obtain the first bond of any prehistoric rite was Radical men to forswear with recapitulation the enormous casual causes assigned by the vulgar, it is necessary
We see that of all the emotional causes, *fright* is by far the most common. Physical causes are numerous and of every variety. An interesting fact to be noticed is the tendency that nervous attacks seem to be reproduced under the influence of the same moral and physical causes.

<table>
<thead>
<tr>
<th>Cause</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fright</td>
<td>314</td>
</tr>
<tr>
<td>Grief</td>
<td>42</td>
</tr>
<tr>
<td>Painful emotion</td>
<td>24</td>
</tr>
<tr>
<td>Sight of skeleton</td>
<td>15</td>
</tr>
<tr>
<td>Adversity</td>
<td>14</td>
</tr>
<tr>
<td>Violation</td>
<td>11</td>
</tr>
<tr>
<td>Guilt</td>
<td>7</td>
</tr>
<tr>
<td>Anger</td>
<td>6</td>
</tr>
<tr>
<td>Joy</td>
<td>5</td>
</tr>
<tr>
<td>Fear</td>
<td>3</td>
</tr>
<tr>
<td>Misery</td>
<td>2</td>
</tr>
<tr>
<td>Frightful dreams</td>
<td>1</td>
</tr>
</tbody>
</table>

\[ \text{Total: } 454 \]
which originally poor rises to them. 

I will content

myself with naming some other determining causes amongst which are some that have been already mentioned among the predisposing ones — abuses of


Authors name Contumacy. over strong intoxication 

of Exanthenias. Blows on the head. Falls. Difficult 

Decision. Solitude. Cold. Sickness of Speech has induced 

two cases caused by Animal Magnetism — 

People who have at first suspected epilepsy — after a time have 

became confirmed epileptics — St. Augustine thinks 

that it may be owing to the Conception of sleep when it 

takes place during the night.

Anatomical lesions - Pathology.

In the examination of the nervous system of a 

Person who has only suffered from the disease for 

a short time it is often impossible to find any 

lesion whatever. If death occurs during a paroxysm 

the Brain is often found to be more or less congested 

Infarction of the white matter of the Brain which
presents a dull appearance; sometimes, besides the hardening, a general injection of the white matter; and in the majority of cases a marked dilatation of the blood vessels. In some cases the white matter becomes soft but there is the same dilatation of the blood vessels. The gray matter is irregular on its outer surface marked off by a very color in its substance, and sometimes altered in its consistence; and in many cases the membranes are found to be adherent to some of the convolutions over which they lie. Sponges of various kinds have been found in connection with the brain or Spinal Cord of Epileptics, as Paracoeur, Ossos, Fascicular, Corpus of Blood. Hypertrophy of the Skull. The Membranes of the Brain and Spinal Cord have been found to be disposed or have been the organs of Injection and Generation. By Brown Segard, among the following anatomical causes to Epilepsy:

I. A lesion of the Cord.

II. There exists a close relation between certain parts of the Spinal Cord and some of the Branches of the arteries of the Face and Neck.

III. Epileptic convulsions may be the consequence of irritation in certain nerves.

IV. Also when an Epileptic affection has its primitive cause in the nervous centers, certain cutaneous manifestations...
of the nerves, that are not in direct connection with the injured part, have the power of producing convulsions (when irritated) which other nerves have not, which are notwithstanding in direct connection with the part affected.

V. Thecutaneous manifestation of certain nerves may have the power of producing Convulsions which the trunk of the nerve does not enjoy.

Dr. Todd considered that an epileptic attack was due to the gradual accumulation of some morbid material in the blood, until it reached such an amount as to act on the brain in, as to speak, an explosive manner.

Epilepsy is now generally considered to be caused by a "Congestion of Blood vessels within the Cranium of a kind that causes Coma & compressing the True Brain, and at the same time irritating the Medulla Oblongata." And this I believe to be the true explanation as far as it goes for I don't think it is enough as there must be some cause for this Congestion and then I think may be found in some affection of the Sympathetic System. We know this system exerts great influence over the Blood Vessels as may be seen for example by dividing it in the neck, when there will be found heat and redness of the skin of
the same side, caused by the dilatation, and consequent congestion of the blood vessels of the part. In the application of sclerosions, the vessels taken place; we have extenuation and pallor of the skin caused by contraction of the blood vessels and consequent diminution of the amount of blood supplied to the part. Now may we not have some affection of the sympathetic situated farther up causing a conformation of blood vessels, and so pressure on the Carotid? Is omitting an attack of splenery? It may be urged in opposition to this, that the disease is often brought on by injuries, that do not affect the sympathetic. The Cerebral and sympathetic systems are so closely connected that an affection of the one will most likely produce influence on the sympathetic, especially in those who may be predisposed to this malady. One peculiarity of this affection is the closure of the Larynx - Some attacks have been stopped by applying sclerosions to the Larynx, and the reason for the arrest has been supposed to be either the action of the sclerosions on the muscles closing the Larynx immediately or due in a reflex manner through the superior and inferior laryngeal nerves. I think it is likely that the sympathetic is acted on first by the Scler
erosion or else the effect of the shock is carried to it by its branch to the Superior Laryngeal Nerve - but whatever the way the sympathetic is affected, it - I believe it acts on the vessels, causes them to contract, and so puts an end to the fit.


Prognosis

The prognosis as a rule is not favourable, but still there are many cases in which it is not as bad as in the others. The prognosis is bad when the disease is connected with any organic affection of the brain centres (or cerebrum); it is the more unfavourable when the disease is hereditary, the longer it has lasted, and the oftener the fits are repeated. It may be said to be hopeless when the memory is lost, and when they are affected also by Paresis. When the Malady is executive the prognosis is better — as for example, when the fits are caused by stone in the Bladder, stone in the intestines, some uterine affection, &c. or in any structural or functional disorder of some part of the body other than the nervous matter. Spiley is particularly liable to be cured spontaneously at puberty, but Hebden's experience is to the reverse. He says he has known People become Spiletoic at that time, but he never met with a Person who then got rid of the disease. Dr. Stockton mentions a case in which the fits stopped when the girl commenced to menstruate, and returned when the Catamenia ceased. Dr. Wall says the menopause is to be viewed as curable however difficult of cure. Though it is impossible to ever
The disease in all cases, with those rare few in which the fits may not be relied on as regards their frequency or severity, may possibly be cured by a beneficial effect in about three fourths of the cases. The may be put off the attacks in a notable manner in the half of these cases that are not cured, and this amendment continue if the treatment has been practiced with perseverance.

"We have through the medium of the disease a criterion by which we may judge with a sufficient exactness of the hope of curing the malady; this criterion is to be found in the number of the attacks suffered up to that time of the Patient. In the Invalids, who have only had perhaps, if the attacks are not very frequent and if they have not lasted more than ten years, the case may be pretty constantly assured."

"By the attacks in succession, the prognosis is on the whole favourable if they are below 100 in number."

"It is the favourable from 100 to 500."

"The prognosis is unfavourable when the attacks are above 500, nevertheless the case has been affected in some cases."

<table>
<thead>
<tr>
<th>Cured</th>
<th>Relieved</th>
<th>Relieved, Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>6</td>
<td>54 attacks below 100</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>8 attacks from 100 to 500</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>5 attacks above 500</td>
</tr>
</tbody>
</table>

He cured 38. Relieved 6 and 14 were relieved out of 58 cases.
Treatment

The treatment may be divided into two classes

I. Treatment of the Fit

II. Treatment in the Interval

I. Treatment of the Patient during the Fit in general example: When the attack is not very violent and no symptoms of an extraordinary character present them:

- always, we have no need to do anything else than unfasten any of his clothes that could exercise an harmful pressure on him and allow all those that might impede the respiration, lay him down (on a bed if possible) with his head raised and as much fresh air admitted to him as possible. If the convulsion are violent, he should be placed in a large bed with a deep hollow in the center, or in some cases it will be necessary for the bystanders to hold him so that he may be prevented from hurting himself by knocking against different things, as the furniture, or falling out of bed. If possible a piece of cloth or cork must be placed between his teeth to help him from biting his tongue or breaking his teeth. If they are attacked at night the hair brush will generally found to be convenient for this purpose.
If the vomit of the mouth is very abundant, he must be turned on his side, so as to allow it to run from his mouth; easier. If the vessels of the head and neck are much distended with blood, and are hot, cold wet cloths may be applied and if the feet are cold, we must use fomentations & to them bleeding has been and is recommended, but for it to be little good for as the return of blood from the make is impeded by the evacuation of the action of the lungs, any measures that are made up of to [unreadable] the disappearance of the face the must be directed towards flushing and cold to the feet, and this may be done sometimes by fashions cold water on the face and chest. & if what I said before be true (p. 50) by applying fomentations to the neck over the situation of the sympathecis. Compressing the mouth with salt has been and to abbreviate the afternoons, and from the experiments made by Dr. Watson it did seem to cure, even he says "probably it is more calculated to relieve a hysterical than an epileptic fit." Children seem to be benefitted by being immersed in warm water some few years ago there were wonderful tales in the papers of attacks being much shortened by a black silk handkerchief being thrown over the face.
There is no need for me to say anything of the administration of ammonia &c. in the administration of
Treatment in the Interval—"During the interval between the attack, we must seek to prevent their recurrence, and this end is to be attained when it is attainable at all, by getting rid of the predisposition to the disease on the one hand, and by protecting the patient against its exciting causes on the other." Generally the patient recovers from the effects of the fit after having a good sleep, but he may remain in a state of excitement with headache, when both, or stimulant pediluvia will perhaps be of good use. If he continues to feel nervous and insomnious, stimulant antispasmodics may do good. Sometimes, he may become furious and delirious, when he will have to be put under restraint, or so as to keep him from harming himself or his attendant. All circumstances that favor the return of attacks must be avoided; as vices, or dissolute habits, excesses or errors in eating and drinking, the sight of others in a fit, a too solitary life. Though it
must be remembered that the cure has a bad an effect.
Certain predisposing causes cannot be put aside as readily:
tiny incisions,stenosis, or the presence of some organic lesion of the nervous system. Bad habits are very difficult of cure, especially as they are only amenable to control by the patient himself. He must point out to him the dreadful end towards which he is hastening, the certain loss of reason to which, when once the disease has shown itself, the continuance of his harmful indulgence will drive him, and to urge upon him the necessity for a short and sudden turn on his part, if he would escape an aid.

One case brought on by excessive

be climbed by applying blistering fluid to

the penis. We must endeavour to improve the
patients' general health and especially to stimulate and
promote to the nervous system. T. Locking and
St. Padthicks, border almost all those who have
recently paid attention to the disease agree in believing
that every thing tending to repress the vital powers does
harm. Mineral waters, especially the baths of Eau-
Fontaine and other are recommended, and certainly
as a rule.

do not allow any specific action on the
nervous system, as much as by improving the health,
the state of spirit was once so highly thought of but now
has fallen into disuse, as though it has been preserved in
some cases till the thing has been discovered. Still no benefit
has ever obtained. The idea of silver is now used by some
instead of the vitriol as it is said not to discolor the skin. The
acid of zinc has perhaps the best reputation. We find
it in glasses of which 18 were cured and the rest
alcohol. This dose is from 1 to 8 grains in Pilier Powder-
Valerian Gritsy (in the form of 1 up to 3i of the Powder or
3i to 3n of the Tincture) is combined as the Valerianate of
Zine (1 of 2grs. in Pilier) in the Valerianate of Antiformal as recom-
mended by St. Hillers in a paper read before the “Academic Imperiale
la Medicine.” Everyone found past benefit from the extract
of Beladonna in large doses. It is useless for me to attempt
to name all the drugs that have been used in sleeping for
I should have to name almost every drug in the materia
medica. One drug is praised today, discarded tomorrow-
to be again landed to the skin. The truth is as Squirrel remarked, Sleeping affords for a time
under every new plan of treatment and we must be
prepared to try any after drug always finding the patient
unaffected for a time, and just when we begin to think that
his really getting well, the symptoms come on just
as bad as ever. Torilla and St. Watson have proved faith
in the oil of Terebenthine and it in doubt does good in some
caused by irritation of the Bowels & Nerves &c. Dr. Marshall Hall recommends Hypobaria in some cases - Dr. Todd elsewhere - Dr. Marshall Hall has faith in Throacity in some forms of this disease - he says "There are two cases of Sleepy in its de ferrit form, in which the rapidity and efficacy of Throacity admit of no doubt: these are: first, Epilepsia Laryngica, with spasmodic laryngism, threatening the extinction of voice; second, Epilepsia Laryngica, with Paralytic laryngism, threatening the extinction of life." - Parastern, to the larynx have been resorted to - More speaking centers rise, the neck of the neck, the neck - in the neck where the upper larynx, and Freiberger Vehrenkohle employs section, is seen placed high in the neck, and there can be no doubt that counter constants are the upper cervical vertex, with tongue, and the removal of all external sources of irritation will often prove useful. - The diet must be simple - intoxicating drinks, avoid early hours, moderate exercise - attention to recreation, and mental excitement or excitation is to be provided against. If there are signs of the approach of an attack, we must find out if he has an epileptic aura - as in some cases, in which this manifest itself at a sufficient distance from the nervous center, one may check off the fit by applying a ligature or exerting strong pressure between the back of the neck, at which it commences, and the thymic center - on the principle: excitation has been performed for a tide removed.
when the aura has passed from their parts, and although anaesthesia sometimes occurs, it would hardly be adopted in the present day—as it would be sufficient to induce the more leading from the past, or sometimes an old cicatrix, or perhaps any other wound again when the cause is sufficent to be mistaken for the rage of the nerve by partial division, or some foreign body being embedded in it. Ammonia ether instilled in from in the room of 0-10 to 1 II as recommended by Metchnikoff, but off a pt—especially when salvarsan to the neck, or mixing cold water on the face &c. In cases in which the bite is preceded by drawing or dullness, it may be prevented by amusing the patient and engaging his attention & cheerful conversation etc. For cases which have been brought on by those on the head—Suturing might be performed in the absence may be caused by some disarranging of the internal hollow—Mercury and lodis of phosphorus have been proposed in cases when the brain is supposed to arise from syphilis or thickening of the Cranial Bones.

Summary of Treatments prescribed by Brother:

1. Treatment of the black—Several precautions for helping the patient from injuring himself—combust ovariitis if it becomes common:
   a) Bleeding

2. Treatment of the accidents that follow the attack. Bleeding
   b) Calmative, antiparalytics. Treatment of patient in cases believing...
Treatment for preventing the invasion and return of the attacks. 


Pra. March 12th, 1864.

[Signature]

William T. Quarrier