Thesis for the Degree of
Doctor of Medicine,
University of Edinburgh.

Some observations regarding
Chronic Neuroasthenia in men —
more particularly the middle aged
man — with suggestions regarding
mode of life and treatment.

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Introduction -
These observations are written from memory without the aid of reference books, and from the point of view of a practitioner of twenty six years standing: who has had the opportunity of the dying neurasthenia and neurasthenia, for over thirty years.

My observations are particularly with reference to ambulant cases of post-war chronic neurasthenia in the middle aged man — men between forty and sixty, with suggestions regarding their mode of life, to do order their lives that they keep at work and to be trained that they do not break down.

Historical Remarks -
This disease, that it must be of very ancient origin has only received renewed attention during the past thirty-five years.

Prof. Mitchell of the United States gave it quite a degree of attention, especially the severe cases that had
to be treated in bed.

I do not propose to go into the
subject of the bad cases, because my
Contention is that cases should be
treated by the general practitioners,
and better treated, while the patient
is ambulant; and that it is rarely
necessary for the patient to drift into
the bed stage.

Definition-
This is one of the General and Functional
diseases of the Nervous system, and
according to the definition of Osler
is a weakness or exhaustion of the
Nervous system, giving rise to various
forms of mental and bodily in-
efficiency.

This essay will be devoted more
to the Cerebral or psychic forms, and
these mild cases of psychasthenia
which cannot be differentiated
from Neuroasthenia.
Etiology -

(a) Hereditary -

I do not mention syphilis in this thesis as that is not necessary, but rather those who partake in excessive intemperate lives, or who have been the subjects of nervous complaints or of mental trouble, and who have children with a neuropathic predisposition.

By leading intemperate lives I mean with reference to alcohol.

When the father has been addicted to alcohol continuously - the so-called "moderate drinker" which is an euphemism for a confirmed alcoholic - where the tissues are never quite free from alcohol, and where the never apparently the worse for alcohol, he habitually takes a little more than can be oxidised in the system - a decidedly neuropathic predisposition is inherited by the children. This predisposition is not so marked with the first children of the marriage.
but is more and more evident in the later children.

When the mother alone has been addicted to alcohol, it is a matter for thought, and I regret that from my experience I am unable to write dogmatically on the subject.

But when both parents have been addicted to alcohol purely, the children's neurotic tendency is proportionately worse.

Undoubtedly strain and stress in the lives of the parents is a cause of neuroasthenia quite apart from alcohol - the in many cases the strain and stress is intensified and complicated by the injudicious use of alcohol.

As to the parents who have been the subject of nervous complaints or mental trouble.

I will only take up those with a nervous heredity in their family history - a nervous streak so to speak.
In the illustrative case appended at the latter part of this thesis the factor of nervous heredity is clearly shown quite apart from alcohol as a factor. This case or rather family history extends over six generations or rather more than two hundred years. In the second generation—taking the direct line only—there is a distinct history of a nervous complaint—viz. asthma—extending over many years. In the first three generations there was no history of any mental trouble as far as can be ascertained, but in the fourth generation there were distinct nervous complaints bordering on mental trouble.

I am not taking nervous complaints and mental trouble into consideration after children were born to much as at the time preceding their birth. In the fifth generation the subject was more or less psychasthenic all his life but in addition to his heredity
for which he had much to be thankful
for, there were acquired and personal
factors in the etiology of his neurasthenia which will be taken up under
the proper headings.
He was always aware that he was
a boy of fifteen of the nervous heredity
in his family, but having a strong
constititution and never nervous about
himself, never spoilt himself and
lived a life of almost constant
emotional and financial stress for
nearly thirty years, and indulged
freely in alcohol for over twenty-six
years before he had a sharp
short acute mental attack in his
49th year which was considered to
be delusional insanity.

This treated as a mental case for
only six days, he has been in hospital
drive as a neurasthenic for over three
months and is not yet fit for duty.

To follow the hereditary causation
of neurasthenia as apart from the
acquisation of it—
in the eight generation we have both members the subject of nervous complaints especially the are born late and while the father was neuroasthenia.

I have gone into the hereditary causation of neuroasthenia at some length, from the point of view of nervous complaints as apart from actual mental trouble - as I think it is the most important of all the causes.

II. Acquired Causes -
Apart from neural disease I am inclined to put alcohol in the first place; plus the neuropathie disposition. When I say neural disease I mean syphilis, but for the purpose of this thesis I purposely leave it out as I am dealing with these functional cases of neuroasthenia. When a case of neuroasthenia is complicated by syphilis no matter how early the latter has been taken
Inland and efficiently treated, I consider the neurasthenia to be no longer a functional disease of the nervous system but an organic one.

It is particularly alcohol in the form of spirits and not in moderation that is most harmful to the neurasthenia and is most productive in the causation of neurasthenia.

Malt liquors and wines are not nearly so harmful especially while those who take them indulge in plenty of exercise and lead an active life.

But I would particularly warn the neurasthenics never with the neuropathic disposition never to touch spirits in any shape or form.

Their wills are weak, only they don't know it, and with people of weak wills they take obstinacy to be discerning with character.

They are never moderate, they are never won, until they realise themselves to be weak and rigidly
School themselves to be strong and acquire strength.

A neurasthenic habitually runs to tears, he habitually uses more strength than is required of the normal man does to perform muscular actions. The same with whatever he does - use up more of his limited capital justly in fact squanders it and then wonders why he is bankrupt in health and expects to make it all up again in a few days or weeks.

He starts life with a feeble nerve organization - some more, some less, and by over indulgence in alcohol, and anything but a minimum is ever indulgence for him, makes it fatter slowly but surely, and transmits to his offspring the feeble organization with a more pronounced nervous predisposition to his own than he would if he had absolutely with-striined from its use. Among the infectious diseases as
acquired causes I would mention chiefly diphtheria and influenza. Since the use of the diphtheria antitoxin I would hardly put diphtheria as a cause. It is only those cases of diphtheria in the for antitoxin days that got well without treatment or in spite of the treatment of those days. From then I don't regard it as a very serious cause. Even the one felt the effects of it for a few years during one's adolescence and early manhood one usually got completely well of it and quite strong influenza is much more often and more serious a cause.

This nervous mental state has a peculiarly exhausting effect on the nervous system chiefly because it has no striking objective symptom to alarm the patient or make him stay in bed a sufficient time to give himself an adequate convalescence.
In my opinion, it is chiefly heredity or myasthenia plus the neuropathic predisposition that cause neurasthenia. The same with stress or strain is a causal factor plus the hereditary nervous strain. In fact I do not believe a person can acquire pre-war neurasthenia without some nervous heredity.

Tobacco or rather, the abuse of it I do not regard as a primary cause of neurasthenia, and in moderation I regard it as comparatively innocuous as long as the consumer did not indulge in the pernicious habit of inhaling the smoke—usually from cigarettes.

(c) Sexual Causes—

I would briefly mention that the two most potent sexual causes of neurasthenia quite apart from venereal disease, are excess in sexual union, cause, and
Sexual miterrhea which is not physiological and normal.
The neurasthenic is too often possessed or possessed by some fear or other and among others the fear of having too large a family.
So he indulges in sexual miterrhea which is not physiological—the coitus miterrheus in fact. This not being normal is neither satisfactory to himself nor his wife so he indulges in excess. Excess of course is a relative term—bet coitus which is not normal prolonged indulged in for a term of years will certainly bring on a high grade of neurasthenia.

Among other factors in the etiology of neurasthenia—the traumatic forms, especially those following upon railway accidents are not considered here. Neither are any which have to do with the present war.
Pathology or Pathogenicity

As I am writing hurriedly from memory I cannot frame any definite recollection of the general or special pathology of the so-called functional disorder. Neither of the morbid anatomy or bacteriology.

However, I think that neglect of the teeth and microbic infection though it cannot be ignored as having no influence in the main features of neurasthenia.

Also a research (along the lines of bile) on the brains of neurasthenics would be the direction in which I should be inclined to look. To see the evidence of chronic fatigue in the brain cells.
IV. **Clinical Features, Signs and Symptoms**

The symptoms may be generalized or localized or both combined, or the local symptoms may dominate the situation.

In nearly every clinical type (Central, spinal, cardio-vascular, gastic and sexual) of the disease the predominant symptoms are referable to pathologic conditions and the psychic effects of these.

Mentally the patients are often found not to be usually, low spirited and despondent. They meet trouble half-way, and by the time their supposed troubles come to them, they find they are not troubles at all. In fact they evolve troubles out of their imagination and are in a state of nerves, dread at the prospect of meeting them.

They have fears of all sorts usually groundless. If they are engaged to be married they are full of fear that it won't turn out all right.
When they are married they are often afraid to let the children out of their sight for fear something should happen to them. They are afraid they won't catch their train or car, or that they will be late for their appointments and usually get there long before the time. They are afraid they won't pass their examinations and until mature blush easily, are shy, timid, and self-conscious.

Both women and men are frequently emotional—bursting into tears or getting furiously angry over trifling things—so they can force a really good emergence with fortitude should it arise, having as a rule a high degree of moral courage.

Most neuroasticmie patients complain of imperfect sleep. Which condition does actually exist in some. They need a lot of sleep and fuss and fume if they don't get what they consider their full quota of sleep. They seem to have no control over their thoughts "racing" when they wake
up for a few minutes in the middle of the night.

This trial is principally taken up with

The Cerebral or psychic form of

Neurasthenia

Neurasthenics in Working Hours

Of course the symptoms depend on the degree of the neurasthenia.

When the neurasthenia is at all severe they are unable to perform their ordinary mental work, and have a loss of power of fixed attention. They are also very prone to flit about from subject to subject never thoroughly mastering one subject before taking up another.

A good deal of this is due to want of proper attention to their own minds; they do not habituate their minds to obey them and learn the habit of concentration.

They indulge in loose habits of thought or discordant thinking and let their minds gallop away so to speak without any attempt at but
a very futile attempt of the will to pull them up. They hardly ever arise refreshed and rested in the morning, but when once on their feet the worry they have had during the night falls away or are greatly alleviated.

So they are always at their worst in the morning. They are prone to indulge in strong coffee or tea to stimulate them and brace them for the day. There seems to be a want of tone in their cerebral blood vessels.

After they have had breakfast, and if they can eat a good breakfast which many can, and after that breakfast commences to be absorbed they feel better. After this luncheon they feel still better. Many feel sleepy and have to take a daily short nap or sleep. This is often an indication of their condition as when less neurasthenic and in better health they find they can do without this.
But it is after tea till bed time that they are at their best in the whole twenty-four hours. This is when they are at their brightest and best, and are the most cheerful and can do their best mental work.

They tend to over indulgence - not so much in food as in stimulants and narcotics as tea, coffee, and alcohol and tobacco.

Even in mental work it is good to do a regular amount every day, when they feel like it they work with energy and long, and then can't get to sleep for hours. They get easily fatigued but once they have their rest and work, so to speak, whether it is muscular or mental work, they can keep up with the best.

But they need more time to recuperate as the machine with them is greater than with the normal man and they need rather longer rest to make up for it.

If they don't get it they get irritable
Weak and weak down under strain for much power.

Many of their Cerebral or psychic cases of neurasthenia are moody, irritable and depressed and from right causes. These conditions are very often due to their excretory organs, the liver especially, not eliminating the waste products of the system efficiently and their suffering from a certain amount of auto-toxicosis.

They are very hyperesthetic especially to sensations of pain - dread going to the dentist for example - much more so than the normal individual is.

This is one of their main characteristics. They are egotists and make continual use of the front passer - I, I, I.

In many cases the so-called 'anxiety' conditions gradually came on, while in the severer cases the so-called 'phobias' are common. The fear of meeting people, of going out into society from a mere shyness to an actual dread of leaving the house and grounds.
or going into the city and mixing with and mixing with crowds. Close doors.

The special senses may be disturbed particularly vision and smell in the fractionate common.

There may be acoustie disturbances—hyperalgasia and even true hyperesthesia.

The reflexes are usually increased and the deep reflexes especially are never absent.

6. Sleep and sleeplessness or neurasthenics.

Sleeplessness may be the first manifestation of the cerebral form. In many cases it is due to alcohol and in an alcoholic intoxication. Further, it is often due to an excess of tea or coffee especially when taken late in the day.

The sleeplessness real or supposed is usually greatly exaggerated, and is most often due to bad management of their diet and the arrangement of their daily life.
They have troubled sleep and dream a great deal. They take their troubles to bed with them and fall asleep thinking of them — through this they may be able to get their minds off themselves. They are self-centered and are not inward in philosophy.

Often they worry too much about their souls and the next world and don't work enough over their vocations in this. This is a species of self-centeredness, a manifestation of their egosim and a symptom of their psychic neurosis.

They don't get absorbed in their work or lose themselves in their work, but it is always how their work is going to reach them, show them off and reward them.

They never seem able to forget their problems for a bit or realize that they are only atoms in the scheme of creation. A great deal of their sleeplessness is due to not knowing how to control their minds, and to ignorance of their
own physiology. They need to go to a school where they can be taught correct methods of thinking, and how to control their minds from drifting into bad habits of loose thinking or of constant thought.

They need to be taught control of body and mind — self-control — and that it is not so much the ambition that is hurtful as the lying awake and worrying over it.

Some of these patients if observed will be noticed to have a nervous twitching of their feet for half an hour after falling asleep. They are not conscious of the movement but often do start in their sleep with sufficient violence to awak en them and sometime to awaken them in a fright. Further another cause of their disturbed sleep is a nervous polyuria which awakens them once or twice during the night, and once awake they almost always go off to sleep again. This symptom disappears
as their general nervous condition improves.

(c) Will power of Neuroasthenics - The will power is usually weak and they are usually obstinate. They have to say "no", when they should say "yes", and they get misguided into things through not having sufficient strength of will to resist.

These people should be very carefully taught when young, and every effort should be made to strengthen their will power. In early life from the first time they go to school till adult young manhood.

And they should have a good environment. Too much is apt to be put down to heredity and not enough to a good environment. They are weak willed about alcohol, about women, and injudicious about spending money - and are very often generous before they are parted. They don't view life in its proper
proportion but look at it through the wrong end of the telescope and find it very small and therefore the biggest thing in it.

1(d) Neuroticism in the Various Decades of Life - with relation to the mental symptoms -
From birth till 10 year age -
usually the infant with a neurotic predisposition shows hyperactive irritability to sounds e.g. church bells, ringing or sudden noises, and will awake suddenly with a start and sob bitterly. These infants also show temper more and get into violent rages and have more difficulty in being calmed and controlled.

The infant develops very often into the timid little boy afraid of the dark and hardly able to hold his own at his first boy's school -
From 10 to 20 years of age -
There is usually a great improvement after the boy is eleven years age -
But about puberty he is apt to have disturbances of the sexual sphere. In the severer cases there may be evidence of sexual perversion in thought if not in deed. And at this time may take place these conflicts to animals which are inexplicable to the lay mind.

After puberty is established he is fairly normal for the remainder of this decade.

From 20 to 30 years of age—
In the earliest years of this decade he is rather neuroasthenic what with the strain of his studies and the realization of the responsibilities of his new found life work.

If he marries he is apt to feel the increased responsibilities and demand of life more than is necessary, but doesn't usually get neuroasthenic yet in this decade.

From 30 to 40 years of age—
Usually he gets quite neuroasthenic in this decade and has a breakdown.
This is because his responsibilities and cares have increased and he has not yet learnt how to do so under his new life to get the most out of it — or rather the utmost out of himself with the least friction.

From 40 years ago to be — at this time he is usually a man of affairs and goes on as if he was still twenty-five years ago until the cracks come perhaps about fifty — sometimes sooner — and he feels he can't stand the strain like he used to and will have to take things a little easier, and hopes to be as well as ever in a few weeks.

When a man has a nervous breakdown before forty years ago and has had a good scare, with adequate rest he usually completely recovers but he must never lead again the sort of life that brought on the breakdown. By adequate rest I mean from a few months up to a couple of years in Europe when he has the time.
to learn his limitations, face facts, and learn how to order his life properly on his return to work. If his family can be brought to thoroughly understand the situation also, he can go on for many years with a life of considerable if not great usefulness.

But when the breakdown occurs just before a man is fifty — to his great surprise he finds he does not recuperate in a few weeks and is fortunate if he quickly realizes that he never can be thoroughly fit again, and that it is foolish to expect it when he has put fifty years of worry into twenty-five years of work.

It is during the years between 40 and 60 when men are at the most useful period of their lives to the community and the nation that the nervous system, the cardio-vascular system, the alimentary system or the urinary system one or other feels the strain and unmistakable symptoms appear which must have attention.
Men of this age have been greatly neglected or overlooked in the past; but in the last ten years the importance of blood pressure has been realised and more attention directed to them. Many of the other cases are cases of psychic neurasthenia, in others the cardio-vascular symptoms are the most distressing.

In the cardio-vascular cases we have palpitation, dilatation of the heart, irregular and intermittent action, precordial pain and in an attack of pseudo-angina may occur.

There are also many cases of gastric neurasthenia from years of neglect of proper personal hygiene. Neglect of exercise and too much sedentary employment and as a consequence a prolapsed stomach, and a colon in the pelvis with intestinal stasis and constipation.

Small forms of neurasthenia the condition of the urine is important
with disturbed digestion the eructs and oxalates may be in excess.
air may be lithemia.
At this time of life especially about fifty, they are apt to get arthritis and either physically or mentally weak. Some worry extremely about this failing sexual power and often give the matter more thought than its supposed importance warrants.

V. Diagnosing and Differential Diagnosis of neurosis.
According to some, Psychasthenia is really an inherited psycho-neurosis while neurosis is usually acquired.
I must guard separate from neurosis the cases characterised by mental, emotional and physical disturbances, those with inhibitory ideas, phobias, gallantry, doubts, unfettered will, and many of the borderline features of the instability of young persons.
It is as well to bear this in mind.
When a neuroasthenic knows his peculiarities and from an early age tries to combat and counteract them and succeeds in doing so, he makes quite a useful member of society, and does good work in the world.

It would be very harmful to his mental condition if he was ever led to believe that his condition was anything more than functional, or likely to be cured.

The Psychiatrist who does not know his peculiarities, and who does not realise what many of his patients and symptoms mean or may lead to is very hard to diagnose from one suffering from a psychosis in its early stages.

Dr. Jaspers distinguishes several varieties,

1. The Doubter
2. The Scrupulous
3. The Criminal
4. The accumulator, the hypnomania.

In whom the manic phase seems to be
least treasurable, and
(b) the genetically proved—
I would not be inclined to
divide neuroasthenies into these varieties
because a neuroasthenic may have
symptoms of all the five varieties
at some time or other in his life, to
a certain extent; all of which ten-
dencies can be overcome by proper
education of the mind and strug-
luing of the will.

If more was understood about
physiological chemistry by the average
man; and temperance drinks were
favorable ones which could be
served as attractively, quickly and
at the same temperature as alcoholic
drinks—there would be fewer
alcoholic neuroasthenics.

The neuroasthenic does not object
starving things well as a rule, so he is
apt to indulge too much in protein
food and not take a properly balanced
ration. And to his system
craves for soluble carbohydrates
in some form or other which is the thing which will relieve his exhaustion. Even when aware of that fact which is hardly to be expected he should be - finding he is not able to get his soluble carbohydrate in an attractive form or in fact in any convenient form, or at all. Being exhausted he turns to an alcoholic drink as the most readily available soluble carbohydrate and the most expensive.

It is much more to the point to find his cook to learn domestic economy and the values of various foods and how to prepare appetizingly a properly balanced diet than to preach temperance to such a man.

The neurasthenie has to be different from the hypochondrie.

The latter is contra distinction to the neurasthenie is the victim of actual delusions regarding his condition.

In pronounced cases of
nervous prostration the differential diagnosis from the various psychoses may be extremely difficult.

The symptoms of the psychic or cerebral form of neurasthenia may be very similar to those of anapptic General Paralysis - the one form of organic diseases of the nervous system with which neurasthenia is most likely to be confounded.

A history of Chronic Alcoholism associated with severe psychic exhaustion should always put one on his guard for General Paralysis and the physician should be sharply on the look out for intellectual defects, aphasia, facial paraly, and sluggishness of the pupils.

VI. Treatment—

(a) Prophylaxis—

The education and upbringing and the progress of occupation...
of new emotions.

It is generally considered that special attention is necessary at birth in both boys and girls.

Special attention is really needed from birth till young adult manhood.

The infant's body and mind should be gradually and systematically hardened.

There should be no coddling, but make the infant an open air one. It will sleep better, feed better, and defecate better, and not distract its mother. Who would only start worrying over it and thus the establishment of a vicious circle in the home will be prevented.

This should be continued into childhood gradually toning up and hardening the body and strengthening the mind.

Punishment should hardly ever be required in the education of the child and boy. They are only a short cut for a hasty tempered person. Who does not understand what is meant by education and who will not take the trouble to reason with his child.
Children have a strong sense of justice
and ill administered punishments
in the heat of temper are an insult to
a child's nervous system, and rattle
for many years.

Many a child with a neuropathic
for disposition has had its nervous system
shattered for years and come even
permanently the partially damaged
for life by an improper and harsh
upbringing.

This strengthening and hardening
process should be continued at school
and if possible at a good boarding school.
They become much less shy and self-
conscious, and less afraid of society
if they go to school instead of being kept
at home. A boy of this disposition is
really handicapped for life by not
being sent to a good boarding school.
His school fellows are his best teachers
of many things especially of self control.

And as he gets old enough to leave
School and go to College he should be
instructed in philosophy.
Important though religious instruction from the age when a child, boy, or young man is able to grasp it—yet it will not take the place of philosophy.

The young man approaches the study of philosophy from a different viewpoint.

The profession or occupation of Nurses.

An occupation should be chosen that he likes and is suited to be fitted for, that is a regular one, and not more than he can accomplish.

For example many a young man would make a great success of being a doctor in the country, perhaps never realize he was any thing but slightly nearsighted if at all, never having broken down, and lead a long life of great usefulness—simply through constantly being in the open air.

Whereas the same man located in a big city with its greater expenses and demands, and the absence of an active outdoor life would be sure to
Wake up.

As regular a life as possible and not being too ambitious are the two most important things.

The failures in the financial world are nearly always due to bad management - the same is true regarding health.

Bad management of one's body and mind is responsible for nervous breakdown. I recommend when the material has been almost of the test to start with.

When I wrote regular work I also meant to include regular pay. The fact that they will get their pay regularly if they do a regular amount of work which they can manage quite well - alone pays many people from becoming neurasthenics.

It is when the neurasthenie tries to do double work for double pay and that pay not regular but irregular and depending on his individual personality rather than his being a cog in a machine - that he tends to break down.
Further an occupation should be chosen for him that does not expose him to injurious influences—such as going into the Tropics.

Nor should a medical man who is neurasthenic do radiography or work until radiotherapy for years, and expect to get better of his neurasthenia.

Neither should he make the giving of anesthesia a specialty. Ether seems to have a preventive action on some nervous systems and will bring on a nervous breakdown in a few months. I regard it as wicked as trying for worse than an alcohol neglected.

16. Personal Hygiene—
   Whether married or not—and the relation of matrimony.
   In discussing the sexual physiology of Neurasthenia I did not emphasize the subject of emotional stress which I am convinced is one of the strongest factors in the causation of neurasthenia.
I would advise the total absence of all emotional stress as far as possible and I regard this as a very important subject - viz. marriage.

A cheerful, healthy wife, calm and well will help him.

But a fretful, sickly, nervous, constantly ailing wife will be sure to bankrupt his nerve capital in time.

It is very much better for him to remain unmarried, unless married to someone with a normal nervous system - his own being but normal.

For a thoroughly whole, some sane woman is pretty sure to be sexually normal also, and have children who are normal or very nearly so.

If he will learn what is moderation for him, i.e. sexual intercourse and to moderate, he will improve his health and have healthy children: but if he avoids having children and indulges in sexual intercourse that is not normal, he is only deceiving
Limping, and sooner or later has to pay in the form of a bad breakdown.

Residence at home or abroad -

Neurotics as a rule should stay in their own country even if they do not stay in the country.

They only break down in a few years if they go to the tropics, or if they go to the United States of America where the competition is keen, and it is a survival of the fittest.

They do better in the British Dominions, Canada, Australia, and New Zealand, but they do not want to be kept there and they live more comfortably than in the old country.

If a man is at all patriotic he can never be a citizen of another country but his own, so while abroad his life is never quite as smooth as if he were in his own: and if he stays away from his own country too long he outgrows it, but he is never really happy unless he is under his own flag.

It has been said that the world
Work of the Neuroasthenic should consist of four and a half days work, and that he should spend the other two and a half days in the open air doing muscular work.

He can at all events arrange his work so that it is not all work and no play.

Any mental work should be done in the early part of the day and none whatever after dinner in the evening.

Any business or worrying work should be completed in the morning if possible; the main work of the day should be done before a possible before lunch.

He should also learn that to digest his food properly he should have a short rest before, and a longer rest after, his meal.

Hobbies and Recreation -

He should choose an outdoor one e.g. golf which is about the most beneficial of all. There is a golf course almost everywhere if not of eighteen.
at any rate of nine holes. There is
usually a club house with its pleasant
social intercourse; and the hills and
valleys of the golf course are splendid
for almost every organ and muscle
in his body.

The Neurasthenic is really an anti-
social individual who does not always
get into close enough touch with his
environment so should make
his hobbies and recreations as
during as possible in contradistinction to making
them solitary.

Riding on horseback or fishing
are both good and will appeal to others.

Gardening and tending his own gar-
den is of the greatest value, and
is within the scope of nearly everyone.

It might interest himself with
advantage in Field Club work
such as Botany, Zoology or Ecology.

These are all good in so far that
they take one outdoors and they can
be made of practical importance.

There are many gaps yet to be filled in
By those who care to use the microscope and investigate the parasitic fungi of crops, fruits and vegetables, and the parasites of birds and animals.

Among the minor hobbies he will find carpentry in one or other of its branches and photography will repay him if he cares to take either of them up.

A neurasthenic cannot afford to be without a hobby—he will find it as essential for him to have his hobby as to have an occupation, and he will earn his living all the better and easier for having the hobby.

Diet of neurasthenics—more particular with relation to alcohol.

Every man has to be his own judge of what is moderation, and what he finds harmful to himself.

But I would expressly warn the neurasthenic not to indulge in spirits.

He may take their or pot in moderation, and the righter wines occasionally, but he is better without spirits—his nervous system can't stand them.
I would also warn him against the excessive use of tea, coffee or tobacco, especially when he finds he depends on them to keep him up to his work.

I regard coffee as more harmful than tea. But I do not regard tobacco used in the form of pipe-smoking as harmful except when indulged in for hours in a close room.

He should try and get a properly balanced diet, and not depend too much on meat. His chief meal should be in the middle of the day, and his evening supper, which should be almost as substantial, it would be well to have not later than six p.m.

He ought to go to bed early, and get up early, and take cold baths, or at all events cold sponge baths.

Before closing what I have to say on Personal Hygiene I would like to mention the importance of the neuro-
pathic individual taking a prolonged holiday at least once a year and away from his ordinary environment.
It is hard for the professional man to get a holiday even once a year, but to the neurotic the professional man it pays him to do it. And he is better to go without his family — and it is a great deal better for the family too. Some find their greatest food in fishing and being among the stream and hills. American voyages if one has the time is even more beneficial than the worn out individual cannot exercise enough to do him half any harm.

This subject of exercise is not properly understood yet and still neuroses. It is the hands spent in the open air that do the good and not the exercise, and if neuroses will once be established the greatest care must be prescribed in the ordering of exercise.

(C) Treatment of the Condition

The best treatment is to remove the cause of the condition whatever it is, whether...
the mode of life that caused the condi-
tion.

The first thing he must understand is that the treatment must be prolonged.
In cases of any severity, at least six months complete absence from
business is necessary, and under their
medical guidance during that time.
And all his strength of will, will
be needed.

A daily programme of how he should occupy his time should be made out
and carried out. He will be sure
to try and evade carrying out things
he does not like, and have the only time
in his hands for introspection and
discordant and futile thought, which
he would not have if his hands were
occupied.

Hydrotherapy is of the greatest
value and is indicated in nearly every
case: and the treatment by drugs
should be avoided as much as possible
if not entirely.

Alcohol, morphia, chloral or cocaine
Must never be given.

A patient will get much more restful sleep by half an hour or even three-quarters of an hour's immersion in a neutral bath (temp 95°-96° F.) than with the aid of any hypnotic.

Psychotherapy is very valuable if used properly, and carefully trained suggestion is most helpful.

One must get at the crux of the whole matter, sometimes one simple cause which may have happened twenty years or more before and which has been apparently forgotten.

But sooner or later it forces its way back from the subconscious again when it was buried all those years into the conscious and that once must be dealt with.

A physician is useless as a psychotherapist unless he is a good listener - it is more important for him to listen than to talk.

The patient must be allowed to talk and tell all his trouble, if he will
do so, for he will not to any or every physician. But there is nearly always some one physician to whom he will tell the whole story.

The physician must give his patient time to tell his story, must give his patient all his attention, listen a lot and say but little — only sufficient in fact to show that he is sympathetic and only occasionally asking a pertinent question.

It is wonderful the effect for good produced by a single therapeutic caress. Satin and not even physician is able or qualified to give it.

At this point it might be well to say that intellectual work on the part of the patient should be judiciously limited, in fact may have to be interdicted entirely for some months in the case of the train worker.

Electricity in its various forms has been used for many years as a royal road to try and get nerves. It was well but has been greatly
overrated. I have used all the different modalities with the exception of static electricity which I believe has more value than any.

However, I think it is more the suggestion and the personality of the physician using it than the electricity that I believe it has some slight value.

Until some measuring instrument has been devised which can record the amount of positive or negative electricity the patient is deficient in I find we will not get very far even when we use meters and milliameters measuring the flow of electricity we are giving the patient at each treatment.

Meanwhile as a doctor I find at the present day it does not commence to equal in value hydrotherapy and psychotherapy in the treatment of neurasthenia.

Hydrotherapy not only gets the skin into perfect order, but will tone up the flabby heart and circulation and the irritable nervous system.
Of course while he is undergoing his course of hydrotherapy and psychotherapy he should have twenty-four hours of rest twenty-four days in the open air—day and night.

I think that those cases do not do well when treated in Ramatovia with a number of others suffering from the same complaint—except perhaps for a few weeks.

They must get back to mother earth and go as a farmer. This is a farmer, work as nearly like one as possible and sleep like one—of course taking care that the exercise is not more than their physician finds agrees with them.

Too many people expect to get well in their city clothes and without dusting their hands.

Work back exercise I also regard as one of the best means of getting their cases well.

In the body gets toned up, and the muscles strong, and the abdominal
organ in proper working order, then is the time to get hold of his own mind, and learn how to make his mind obey him, also how to learn concentration and how to think properly and along proper lines.

He will then be able to cast out all discordant thought and cease to be a mental drifter.

Having already made suggestions on the mode of life of nervous ones under the heading of Prophylaxis and Personal Hygiene and also Treatment I will briefly note a few which I have not yet touched on.

Some of these are important for the ambulant case to help in mind to enable him to keep up his work.

His motto should be moderation—moderation in nearly everything, and great moderation in the remainder.

Of course if he is a sensible man he will realize that there are some things he cannot have anything to do with at all.
He should get a wise physician, and keep in touch with him from time to time. Every six months he should get his physician to make a thorough careful and complete physical examination of him — and pay him handsomely for doing so.

He should report as to his diet and how he feels, according with him, and have an expert and complete analysis chemical and microscopical made of his urine.

Further he should have his blood pressure taken after exercise.

If he has a dilated and polypoid stomach he can take smaller meals and not be on his feet unnecessarily after them, and limit his liquids especially at meals.

If his colon is lower than normal a great deal can be done by wearing a properly fitting abdominal belt applied below the umbilicus, or learning to use the lower half of his abdominal muscles.
It is surprising what can be done in the direction of lifting up and keeping the abdominal organs in better position if he really puts his mind on these muscles.

Surgery for prolapsed organs is not for nearsighted if it can possibly be avoided as it often makes a slight curable case of neurasthenia into a serious and chronic one.

The neurasthenic must try and lead a properly balanced life.

The theatre and music, especially the latter, he will find most superficial.

He must rigidly eschew anything exciting like the stock market or horse racing, and gambling in any shape or form. Gambling is much worse for him than drink.

In addition to taking his annual holiday for it has been well said — "a man can do a good year's work in eleven months and not in twelve." Don't let him neglect to use the days and half-days when he ought to
outdoors with his family or his friends.

One man I know of who realizes
there are fifty-two Sundays in the
year, and spends them outdoors with
his sons, in lieu of an annual holiday.

That can very often be done in
addition to the two long holidays
annual holiday but will not take
the place of it.

The half-days in the course of the
year would also be as many as
the Sundays.

It is all a case of management.
He can arrange his business days
so that the heavy days alternate
with the lighter days, so that he
works regularly but only works
at his utmost capacity intermittently.

And if he wants to sleep well
he should laugh a lot, or read
light literature or books on humor
before going to bed, followed by a
chapter of the Bible or of Marcus
Aurelius or Epictetus when in bed.

Men nowadays are using
Scientific management in their business. A man must learn to apply it to his mode of life and he will get as good if not better results than in his business.
Prognosis-

One must first of all exclude the possibility of any organic disease by careful, thorough, and repeated physical examinations.

The prognosis is very hopeful in the great majority of cases of neurasthenia, and in the absence of any organic disease, it is not discouraging.

It depends on the sum of the inherited tendencies of the neuropath and those acquired from his environment and personal habits.

If his inheritance is not a bad one, his environment can be changed for the better, and his personal habits corrected and improved; and the outlook is quite favorable.

Where the inheritance is not so good, the prognosis cannot be as good even with improved environment and better personal habits.

Even in the alcoholic or the organic neurasthenic, the prognosis is favorable in the absence of organic disease, provided
that he never touch alcohol again.
It further depends on the age of the patient and how near he has gone
to nervous bankruptcy.
A tuberculous individual will
give up gladly the brightest prospects
and his thousands in the city for his
hundreds in the Country merely to
get his disease arrested.

It is purely illogical of the Neurasthenic to expect a complete cure:
but he would not exchange places
with the Consumptive.

That some nerve weakness, some
permanent partial damage is left
after a severe attack of Neurasthenia,
got if he also will exchange the
city for the Country he will in great
probability be apparently cured.
The Prognosis is not good as long
as there is a dominant cause for the
neurasthenia which has not been
or cannot be removed.
Family history of a family extending over six generations to illustrate the hereditaryiology of nervousness.

In the first generation born more than two hundred years ago and who lived in the country there is no available history of any nervous complaints. I am taking the male line direct through the six generations.

The ancestor belonged to the Professional and married a county lady. They lived a quiet life and had a large family. Twins were at least — and died at a good age.

The second generation also lived in the country but here there is a history of a nervous complaint.

The male of this generation, son of the above, also belonged to the Professional class. His wife was a martyr to asthma. They also lived a quiet life and had a large family. Twins twice — and died at a good old age.
In the third generation the male was a twin and was born in the country. He also belonged to the professional class and went all over the world. He married his first cousin and it was through her that the delicacy of her children was supposed to have been introduced into the family. I mean by delicacy the element of nervous heredity.

It seems more probable that the male of this generation that never nerves in his life—inhaled it from his mother and transmitted the predisposition to his children. He was well off and never lived a life of stress or strain while his children did.

Thus in these three generations there was no history of any mental trouble as far as can be ascertained.

In the fourth generation there were distinct nervous complaints bordering on mental trouble.

The male of this and the preceding generations were both total abstainers.
The male was born in the city, his wife also. He was again a professional man a man of fine brain and strong character, life long abstainer from tobacco as well as from alcohol and always very religious from his youth up.

He had a stroke in Sweden when twenty seven years of age and had neurectomia till the date of his death aged forty three years. He had a wonderful physique which he never dissipated in any way but after the stroke he was never able for work again.

My contention is that he inherited a neuropathic constitution rather for disposition which showed itself only slightly before the stroke but which was very manifest after, and the symptoms of which many times verged on mental trouble in the sixteen years following the stroke. If he had inherited a normal robust nervous system he probably would not have suffered from neurectomia following the
stroke—neural asthenia of sufficiently severe a type to prevent his ever working again.

His brother was never normal and was never capable of managing his own affairs and had to be kept in the country. He was a life long abstainer religious and very foolish about women. He died between 60 and 70 in an asylum having been placed there shortly before his death.

The wife of the male of this generation was of a strong good long lived ancestry with no history whatever of nervous or mental trouble.

In the fifth generation the male the eldest son of the fourth generation who also was the eldest son—had a distinct neuropathic predisposition from birth—in fact it might be more strictly called a mildly psychasthenic predisposition.

This was more or less noticeable from birth till ten or eleven years ago. He quite strong at fifteen but a
had a severe attack of diphtheria in that year followed by pseudo-angina till twenty-two. His father died when he was nineteen years of age and he had a certain amount of strain and stress as well as the sequelae of the diphtheria so was more or less neuroastic from nineteen to twenty-two.

In addition, he had a sharp attack of mumps at twenty-two. This was after he had taken his degree and practiced his profession some months.

From twenty-four to twenty-seven was very strong.

Married at twenty-seven when he had a mild mumps. He broke down when he had to take nearly a year's rest.

Worked very hard the next fourteen and a half years (three years out of his own country and with great strain and stress the whole of that time) and had a short sharp acute mental attack in his forty-fifth year.

Among his brothers and sisters, the hereditary (not acquired) nervous complaint took the form of asthma.
Eczema, an ascertainng mystagmus, and is one member of the family a jennoby that almost bordered on insanity. All the family were very high tempered.

The wife of the male of this generation had chosen in childhood and was very highly bred fragile and nervous. In the sixth generation the eldest child a daughter had slight Eczema in infancy as the only nervous complaint. But the son born while the father was neureopathic not only had severe Eczema in infancy, but has been a martyr to asthma since two years of age, it hammer badly and is anaephiphatic.
References—

The only book I have referred to is Professor Oler's Text Book on The Practice of Medicine, the 8th Edition, and the only article the one on Nervousness in that book.
Summary and Conclusions

I. Definition - That neurasthenia is a weakness or exhaustion of the nervous system, giving rise to various forms of mental and bodily inefficiency. The cerebral or psychic form and mild cases of psychosis are only dealt with.

II. Etiology

1. Hereditary causation - Where the parents have led irregular lives or are subject of nervous complaints or mental trouble and who have abused the use of alcohol. This hereditary causation considered the most important of all the causes of neurasthenia.

2. Acquired causation - Alcohol the most important in causing the toxemia in giving a worse liability to injury. Diphtheria and influenza also important causes, particularly the latter.

Pre-war neurasthenia hardly possible without some nervous tendency.

3. Sexual causation, considered quite apart from malarial disease.
III. Pathology -

negative - has yet to be worked out.

IV. Clinical features signs and symptoms -

Sensory symptoms - fear, patients are very emotional - have misperceptions, sleep and have not sufficient control over their thoughts.

Cerebral or psychic form -

too great a fixed attention - bad or worse habits of thought - weak will power - poor concentration.

Prone to indulge in coffee, tea, or stimulants owing to not rising refreshed in the morning - sleeping in the day tonic - tendency to over indulge in whatever they do. Easily fatigued by bodily or mental work. Importance on mental state of condition of excreting organs. Especially the liver.

Ego Centric

very hypersensitive to pain - hypochondria

anxiety conditions and phobias.

vision usually distorted.

sleeping and sleeplessness.

usually toxic and due to bad manage -
Most of this dietary and the arrangement of this daily life. Not bred in philo-
osophy. Need be taught correct methods of thinking.

Will power - break - necessity of a good environment and nunciation of good
personal habits. While growing up -
the various decades of life -
From 1 to 70 years - mind is in childhood
10 to 20 - this part can be in social
sphere about puberty.
From 20 to 30 yrs - slightly more begin to rise
about twenty two years.
30 to 40 yrs - first breakdown occurs
usually due to ignorance.
40 to 60 yrs - a more serious breakdown
usually about 50 yrs of age, leaving some
permanent damage to the nerves
system or one of the other systems -
many symptoms which demand attention.
Condition of some important in all forms
of neurasthenia -

I. Diagnosis and Differential Diagnosis.
From Psychasthenia, Hypochondrias,
The various Psychoses, organic Disease
and General Praxis.

VI. Treatment.

Prophylaxis - the importance of starting at birth and going on to adult manhood with a strengthening of body and mind, and the best possible environment.

Proper nutrition should be a regular one, and in the open air or country, if possible. Avoidance of ambition and trying more than one can accomplish.

Personal Hygiene -

Importance of a suitable marriage. Avoidance of emotional stress which is one of the strongest factors in the production of neuroasthenia.

Residence in his own country -

Limitation of intellectual work and importance of spending an appreciable time using his muscular system in the open air.

Importance of hobbies and sufficient recreation and social intercourse.

Diet to be properly balanced and, and avoidance of alcohol, and again extensive use of coffee or tea.
Treatment continued -

Treatment of the condition must be prolonged, and needs all his strength of will.

Hydrotherapy and Psychotherapy are most valuable. No drugs in the cure.

Importance of work as the hand limited to their capabilities. Importance of moderation in all things.

Need for a life insurance examination by his physician every six months. Physical exercises for his abdominal muscles and organs - avoidance of excitement.

Must learn how to utilize his spare time and manage his business. The aid of philosophy to get sleep. Use of scientific management in his mode of life - as regards his body and brain.

Prognosis and Conclusions -

The Prognosis is good if there is no organic disease present. Don't put down every thing to heredity but improve the environment and
Personal habits and hand on as good a hereditary to his children as he started with, or if possible a better one.

Prognosis depends on the age of the patient.

In my case can be answered, a great number greatly ameliorated, a few cured - and all can be made useful citizens if they will be truly scientific in their management of their fires and social in their habits with their fellow men.