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A few Remarks on Encephalitis.

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Inflammation of the Brain and its membranes is a disease commonly met with in practice under the name of Phrenitis. In which we find the symptoms of meningitis and cerebritis variously blended, according as the one of the other predominates, and hence the general unsuitability of the neurological definitions which have been given of Inflammation of the Brain. When Meningitis occurs in a separate form, it appears to present the general characteristics of membranes as opposed to those of parenchymatous inflammation, that is to say, the pain is more acute, and the inflammatory excitement of the whole system is much greater. Cerebritis again may be either general or partial. Acute inflammation affecting the whole or the greater part of the cerebral substance is indicated by symptoms very similar to those of acute Meningitis, the pain in the head being intense, along with very high febrile excitement. The attack however not coming on so suddenly as in acute Meningitis and is more frequently preceded by premonitory symptoms such as pains, feeling of fulness in
the head, vertigo &c. The symptoms of general cerebritis also usually terminate in coma and collapse much sooner than those of acute meningitis. General cerebritis seldom takes place without more or less affection of the pia mater, and is almost always an acute affection, and terminates fatally in a short period of time. Persons have died as soon as within twenty-four hours, and few survive much longer than a week. Partial cerebritis may be acute, sub-acute, or chronic. The acute form being marked by symptoms which would seem to indicate inflammation of the cerebral substance—the lesion of the particular functions being more or less remarkable according to the part of the organ principally implicated. The sub-acute form which is the most frequent shows the same symptoms of the acute but in a minor degree of intensity. In this form the disease comes on very insidiously. The first symptoms consisting at first of simple headache, dizziness, dimness of vision, perhaps also stammering or drawing of speech, and all without either fever or delirium, causing little or no apprehension on the part of the patient or his
friends, until he is suddenly seized with coma, or paralysis of a limb, or hemiplegia, under which he sometimes rapidly sinks, and at other times partially recovers, but eventually falls a victim to a second or third attack of palsy.

The structural changes produced by inflammation of the cerebral substance will vary according to its degree and duration. The only appearances usually observed in acute cerebritis are a florid injection of the diseased substance, showing when cut into, a number of red spots which proceed from rupture of the capillary vessels. Suppuration is seldom found, on account of the disease following a rapid course, nor is mortification much more common. The more so where the inflammation results from injury than where it is idiopathic.

The subacute forms of cerebritis give rise to abscess, which is most frequent in the hemispheres - simple softness of the texture of the brain. Rescindication, induration of the substance, this last most frequently found in women and typhoid fever patients. The chronic cerebritis generally occasions softening or induration, but the lesions arising from the subacute are
also sometimes consequent on this.

As before stated, cerebritis and meningitis frequently occur together, but it is plain that these must be great difficulty and uncertainty in attempting to diagnose each separately. Indeed it appears impossible to do so. The symptoms of what is called phrenitis which are most satisfactorily ascertained are as follows. There is great disturbance of the vital functions, a high state of excitement at the commencement, followed by a corresponding degree of depression, running speedily either towards recovery or a fatal termination with comparatively but little intervention of the acute symptoms. In partial cerebritis the disease is seldom so rapid, its invasion being more gradual and preceded by symptoms of irritatation in the organs of voluntary motion, emotion, or intelligence and in the advanced stage of the disease the functions of these organs almost invariably become impaired or destroyed.

There are some well marked instances of apparent amendment even after paralysis has taken place, and although febrile excitement may be diminished, the danger
cannot be considered at an end - the favourable appearances are often fallacious, being soon followed by repeated relapses which frequently prove fatal.

In some cases of partial cerebritis of some continuance, the symptoms assume a periodical character, returning regularly at certain intervals; therefore care must be taken not to mistake the disease for intermittent fever. Instances are recorded of such mistakes, the consequences of which have been fatal.

The well-known tendency of most diseases of the brain to assume a periodic form, militates against the opinion of these exacerbations being the result of sudden concretions of that organ.

One of the most frequent symptoms in partial cerebritis at an early period is a local palsy, along with spasmotic rigidity of the muscles, producing permanent flexion of the limb or member. Such symptoms most commonly manifest themselves in the arms primarily, in which it is generally greatest, even when it extends to the lower extremities. The tension of the flexed limb sometimes being attended with considerable pain, which however is not always present. In some cases of acute
By influence I mean influence of the
best...
Meningitis and phrenitis there is a convulsive rigidity, or retraction of the muscles, but no paralysis, and when the retraction intervenes, the patient recovers the motion of the affected part. The rigidity alluded to being scarcely ever limited to one limb or even one side of the body, as in partial cerebritis, affecting both sides in various parts at the same time, the sensibility also remains entire, while in the greatest number of cases of partial cerebritis it is obtuse, and in some members of the body is often entirely destroyed. Although these rules may give some assistance in attempting to distinguish between Meningitis, Cerebritis, and partial inflammation of the brain, they are not always to be depended upon, there being such an endless variety of symptoms and changes during the course of this disease. Some have thought that convulsion of both sides of the body may indicate Meningitis, but when the substance of the brain itself is diseased, the power of voluntary motion is more or less impaired, if not totally destroyed, as seen in paralysis - we sometimes see both sides of the body convulsed by paroxysms, and when this subsides, one side of the body or part
of it may remain paralysed - in such cases there is reason to believe that Meningitis has
supervened to partial Arthritis.
In the present state of medical knowledge
we are not able to ascertain from the symptoms
the exact state of disease the brain may be in,
or when the disease is local, can we decide on
its seat. Headache, delirium, convulsions, spasm-
adic rigidity, paralysis with a greater or less
degree of coma, are symptoms, some of which
are always present in cerebral inflammations,
whether it may be a state of simple inflammation,
serous effusion, paralysism, cerebral,
(ecyted or diffused) ulceration, the disease always
proving fatal in nearly all these states.

Before attempting to enumerate a few of the
morbid appearances presented by the brain after
death from inflammation, it may be proper
to remark that several of these appearances
may depend on accidental circumstances, which
ought not to be mistaken for the effects of
disease, the brain of a person who has died of
an acute disease is always more vascular than
in those who die of a chronic affection.
If the head of a subject to be examined be lift,
In a dependent position for any length of time, a considerable degree of injection of a uniform redness will be found to have taken place from the mere gravitation of the blood, this frequently takes place in warm weather or if the examination be delayed until putrefaction may have commenced. It is very difficult in the early stage of inflammation to distinguish between this state and simple congestion. There is however one incontestible proof of previous inflammation, viz., the deposit of a new product in any texture—such as lymph or pus.

The morbid changes which are observed to have taken place in the membranes of the brain after inflammation are—increased redness, thickening, opacity with increased firmness, serous effusion, beneath, or upon the arachnoid, or into the ventricles as in Hydrocephalus—a prominent exudation, and false membrane, when the exudation is beneath the arachnoid, it is elevated above the convolutions, or rests on the surface, the sulci between them is filled with a fluid of a gelatinous appearance.
When the cerebral substance is the seat of disease, there is a high degree of vascularity of the brain, which when cut into, presents a great number of red points from which blood oozes. The naturally cloudy capillaries being then filled with that fluid. There are often observed larger red spots, somewhat resembling echymoses, which is owing to the rupture of several capillaries. When numerous, they give the organ a mottled or marbled appearance with various tints of red, when the substance of the brain is much infiltrated with these effused drops of blood. The delicacy of its structure causes it to be easily broken down, becoming softened round those spots, several of which may be found with small coagula of blood in their centre, constituting what is called the red softening.

Cerebritis may prove fatal by suppuration. In such cases the pus is occasionally found in thin layers under the arachnoid, sometimes between the arachnoid and Dura Mater, and between the latter membrane and the Bone, pus is also found in the ventricles, but purulent matter is most frequently
found in the substance of the Brain, either in distinctly defined abscesses, by a delicate soft cyst, or an extensive portion of the central substance may be found in a semi-purulent state, without any well defined cavity.

The cerebellum is very frequently the seat of these abscesses, both defined and otherwise. Dr. Robertson (late professor of Practice of Physic of McGill College Montreal) mentions the case of a boy, eight years of age, who had been affected with symptoms of chronic hydrocephalus for several years, after death, several ounces of a clear fluid were found in the ventricles, and an abscess surrounded by a thicker a firm cyst in the cerebellum. It was of the size of a hen's egg, and of a similar form, in this case no paralysis or convulsions took place until within a few weeks of the boy's death. But he had always complained of headache was dull, and disinclined to amuse himself like other children of his age. Abscesses of the Brain are sometimes the consequence of acute, at other times of slow incisions.
or chronic inflammation, as appears in
the case just quoted - the pus in these
instances being circumscribed, is prevented
from doing injury to surrounding parts.
the containing cyst however is apt to
being on a fatal termination of the disease by
exciting fresh inflammation in the adjoining
central substance. The cyst appears to be
formed nearly in the same manner as it is
in Phlegmonous inflammations viz. by layers
of coagulable lymph becoming organised
and their delicate vessels musing or rather
forming a union with those of the surround-
ing portions of the Brain - The first layers
are thin and remarkably delicate, other
layers however being added until the walls
of the cyst become completely organised.
it sides have been found in cases of long
standing to be nearly fibro-cartilagineous,
and even encrusted with calcarious deposit.
Suppuration has been known to take place
or be produced by inflammation of the
Brain in a very short time. Laurence has
seen it within four and twenty hours -
Heracomb met with small undefined
abscesses at the end of four days illness—Cases are recorded of extensive suppuration existing in the brain without any symptoms indicating such a disease until almost immediately before death, when from some sudden exciting cause decided symptoms of cerebral disease manifest themselves, and the patient sinks into a state of coma and insensibility, or he may be attacked with convulsions—

Another and very peculiar termination of inflammation of the brain, and which has lately been the subject of much inquiry and observation, is what is called Remollement or softening of a portion of cerebral matter. It is sometimes called a termination or a consequence of inflammation, owing to a large majority of those who have investigated the subject, and who have given their opinions to the public, having viewed it in that light—There are some French authors who consider this change of structure as an affection sui generis, distinct from any other, as one of their (Racamier says) analogues to softening of the spleen, and the primary
cause of certain nervous fevers — Mr. Postan one of the authors on cerebral diseases likewise considers
it as an affection of the brain entirely, Dr. Genereus
although he admits that it is sometimes the
result of inflammation — almost, if not all
the cases related by him occurred in persons
about 10 years of age, he calls it gangrena
similis, and considers it a real gangrene of the
brain, depending on a diseased state of the
bloodvessels —

This peculiar disorganization or softening of
the brain, consists in a part of the cerebral
substance being broken down into a soft,
pulpy mass, retaining its natural colour,
but having lost its cohesion and consistence.
It differs from suppuration in wanting the
colour and texture of pus. Those portions of
the brain in which it most frequently
occurs are the white central parts, and
they retain the pure milky colour, according
to the observations of Dr. Cullen. It may
be found in any part of the brain, but its
most common seat is the dense white mass
forming the Corpus Callosum & Forix.

Dr. Robertson states, that all the cases
which came under his notice were ushered in by unequivocal symptoms of acute inflammation, in two of these cases, pus was found in other parts of the brain, and in one, considerable effusion of serum into the ventricles, the subject was a boy, eight years of age, who died with all the usual symptoms of acute hydrocephalus. Ulceration is a rare termination of cerebral inflammation; it is said to have been found on the surface of the convolutions, on the optic thalami, and corpora striata. Dr. Kobstein says he saw a case of very decided ulceration on the surface of the convolutions of the left hemisphere. The ulcerated surface was partially covered with an albuminous exudation, its edges were jagged and irregular. He also saw a case where there appeared to be a considerable ulceration on the side of the left hemisphere towards its base, there was a fracture of the skull with a spicula of the inner table projecting into the substance of the brain at the ulcerated portion; the man died in six days after the accident, being the entire time insensible.
Diffusion is more frequently a consequence of meningitis than of cerebritis, and when we see much effused fluid either on the surface of the brain, at its base, or in the ventricles along with inflammation of the cerebral substance, the pia mater and arachnoid are usually, if not always found to be affected.

There are several diseases with which encephalitis may be confounded, or for which it may be mistaken. (By encephalitis is meant inflammation of any part of the cerebral contents), although there are symptoms and phenomena which assist us in forming a nearly accurate diagnosis, yet no one can doubt that cases do occur in which the diagnosis must be involved in great doubt and obscurity. It is more difficult to distinguish between inflammation of the substance of the brain than of its meninges, it is often impossible to form a correct diagnosis in these cases, and fortunately it is not of much consequence as regards the treatment proper to be employed. It having been found that what is good for the one, is equally so for the other.

In the greater number of cases of meningitis, the attack is not preceded by premonitory
Symptoms. There is decided febrile excitement without paralyses, followed by collapse, convulsions and spasmodic symptoms take place on both sides of the body, while in cerebritis they are only partial at first, the paralyses becoming complete as the disease advances. In this there are well marked premonitory symptoms, with irregular exacerbations and remissions. Some of the premonitory symptoms of cerebritis resemble rheumatism, such as for instance as pain in a limb with numbness, weakness, and stiffness, but there is no local swelling, redness or pain on pressure. There are several other diseases, many of the phenomena attending which, very much resemble some of the leading or prominent symptoms of cerebritis—such as Epilepsy, Chorea, Hysteria, Nervous and Bilious Headaches.

Inflammation of the Brain exists in combination with various other diseases, such as Hypertrophy of the Heart, inflammation (especially chronic) of the lungs, liver, stomach and bowels, as well as with more general affections of the system, as continued fevers, some of the Eanthemata, as Measles, Small-pox, Scarletina, Erysipelas.
If therefore ought always to be borne in remembrance when treating any of these diseases, the possibility of such a combination, more especially if any symptoms arise indicating head affections, the presence of one disease often modifying the symptoms of another which may be existing at the same time. In endeavouring to form a just diagnosis we must be careful to discriminate between diseases attended with vascular excitement, and those arising from a purely nervous irritant, this is more particularly necessary as both causes sometimes react on each other. Much important information may be obtained by enquiring into the previous habits of the patient, as well as attending to the predominant character of the temperament, and of the prevailing phthisis whether sanguineous or nervous. The great irregularity of purely nervous symptoms form a striking contrast with the comparatively uniform and durable nature of those which originate in or depend upon disorder of the vascular system, and the absence of all tendency to permanent paralytic affections in nervous cases greatly assists in forming a proper distinction.

As connected with the subject of central inflammation...
we may take notice of the opinion of some French
pathologists who have made minute and most
interesting enquiries into this subject. They attempt
to point out the particular portion of the brain
affected during convulsions by attending to the various
modifications of the paralytic symptoms—
They coincide with the opinion of many of
the older writers that, if the nervous filaments
could be traced up to their remote origin in
the brain, it would be found that each part
of the body receives its nerves from a determined
part of the brain, consequently any lesion of that
part must affect the functions of the organs to
which it furnishes nerves. Pinel, Forville and some
others from numerous pathological observations
made on the subject consider, first, that
the paralysis of the organs of speech depends on
disease of one or both anterior lobes of the brain,
(Alkoullard conceives that the anterior lobes of
the brain precedes the memory of words as well
as of the organs of speech), secondly. They consider
that paralysis of the inferior extremities depend
on disease of the middle lobes of the brain,
and of the Cerebral Striate, thirdly. That paralysis
of the upper extremities depends on disease of the
Posterior lobes of the brain, and of the optic thalami,

some of the same authors, particularly Foillle,

concerns that the cortical substance is the seat

of intelligence or mind, and that the medullary

matter is connected with motion. The principal

grounds for this opinion are, that the cortical

matter has been found in the case of lunatics

highly injected, and often inflamed, whilst

the medullary matter remained healthy, also

that there have been several well marked cases

doctrine of the cortical matter in insanity.

Dr. Burnett in illustration of this remark, that

when disease (such as inflammation) attacks

the parts of the brain, or the Membranes, that

the functions of mind cease nearly at the

commencement of the malady — and on

the other hand, when disease, such as tumors,

begin near the centre of the brain, and

proceed outwardly, that the mind is last

affected. The small size of the convolutions

and small quantity of cortical matter in the

brains of idiots, also serves to illustrate the

latter opinion of Foillle.

In regard to the progress of disease of the

brain, it may be observed, that, when the
extreme delicacy of the structure of the brain. The importance of the integrity of its functions to the preservation of life, and its being confined within a bony cavity which prevents expansion in cases of inflammation or the escape of effused fluids, are considered. Almost any disease of the brain or its membranes must of necessity be attended with great danger—the symptoms indicating the slightest amount of danger are high fever, violent delirium, spasm or palsy of both sides of the body—coma, paralysis of the bladder, retention of urine, oppressed or embarrassed breathing—it may prove fatal in the acute stage, or its subsequent effect may destroy life, or terminate in paralysis more or less extensive—and again, when the spasm or paralysis are confined to one member, or on one side of the body, the sensibility but slightly affected. The prognosis is more favourable, as this indicates that only one hemisphere or a part probably of one side of the brain is affected.

Encephalitis is more dangerous in young and old persons, than in those removed from both extremes, and it is better to have...
to manage the disease in a child than in a person advanced in life, from there being a much more favourable prognosis in the one case than in the other. The more undisturbed the state of the intellect, the greater is the chance that the affection is confined within a small compass of the brain. The absence of delirium, however, must not always be taken as a favourable symptom. For it is well known, as before stated, that there may be extrinsic and fatal disease of the brain without delirium, and we consider as favourable circumstances, after an attack of coma, a return to consciousness, without affection of the intellect, sound sleep, regular breathing, return of motion to the paralyzed part, headache and delirium as less unfavourable than coma—It should always be borne in mind, that cases of inflammation, especially of the substance of the brain, are very liable to relapse, which should make the practitioner very guarded in his prognosis—When the disease assumes the chronic form, accom-
panied with creeping palsy, the prognosis
must be unfavourable, as there is great
danger of failure of the powers of the cons-
titution, and sooner or later it terminates
fatally. Inflammation of the brain consequent
on concussion, is observed to be more dangerous
than that caused by an injury of the head
with an external wound —
Gleucritis, in consequence of sanguineous apo-
plexy, is always attended with great danger
When profound coma is succeeded by headache
and delirium, it may be favourable, as
indicating an arrestment, of more or less
of the previously paralyzed powers of the
brain, when on the contrary, they are
followed by coma, it is a bad omen.
The causes of inflammation of the
brain and its coverings, are in most cases
such as entirely elude our observation,
but may notice such circumstances as are
generally supposed to cause it — The diff-
ERENCE between predisposing and exciting
causes is sometimes merely nominal, for
a predisposing cause, if its activity be
sufficiently increased, may become an
exciting cause — What are considered as
predisposing causes are a plethoric habit, particularly in persons habitually active. There is an hereditary predisposition, or tendency, to head affections in some families, whether they be of thin, spare habit, with long neck and pallid countenance, or of a full habit, rosy complexion, and short neck. Which constitution constitutes what is called the apoplectic diathesis. Hyper trophy of the heart is a frequent predisposing and sometimes an exciting cause. Heart disease acts either by retarding the regular return of blood from the head, or causing it to be propelled with excessive impulse towards the brain.

Inflammatory affections of the brain often appear in the course of febrile affections. In the advanced stages of continued fever, it is always a bad symptom when head affections come on gradually and insidiously, requiring the most active treatment to save the patient any chance. In these cases again care must be taken not to mistake common delirium with stupor, as frequently met with in fever. For inflammatory
affections of the brain, the former passing off as the fever subsides—

One of the most common and severe examples of cerebral affections supervening on fever is met with in Scarletina, some persons (especially children) recovering from which, whether it may have been mild or severe, after some exposure to cold, or irregularity in diet, some headache, being neglected or improperly treated, is generally followed by convulsions and coma—Trance which so frequently supervenes on these symptoms, or more correctly, on Scarletina, precedes these symptoms, instead of attempting to judge by the strength of the patient, active purgatives, low diet, and bleeding are considered the proper remedies—

Among the most common, and both predisposing and exciting causes are the suppression of long continued or natural discharges from the body. One of the best examples of which is the stoppage or suppression of the catamenia in married or delicate young females, headaches or any other symptoms in the head occurring
under such circumstances require particular attention—

The suppression of artificial discharges, and of cutaneous eruptions. The healing of chronic ulcers, when followed by headache, vertigo, ought not to be neglected, among the causes of inflammatory, head affections may be mentioned, fevers, and Rheumatic affections, over excitation of the mind, depressing passions, such as grief, fear, or great bodily fatigue, long continued nervous headaches, Epilepsy, Mania, and all neuralgic affections of the brain, for that organ cannot suffer long without a reaction taking place in the vascular system, unless the irritation be so intense as entirely to destroy its power. Painful delirium is a great source of cerebral irritation. Intense and long continued pain from any source may cause delirium and coma. Essential injuries, as falls, blows, 
are among the most direct and more frequent causes than we are generally aware of, especially in children. The injury, being often apparently slight, and some time intervening between it and any alarming symptoms
causes it to be entirely overlooked or forgotten.
This certainly greatly adds to the danger, as the first stage of the disease, and the only time where remedies can be confidently had recourse to, is neglected.

In some cases of Pityriasis there is a great tendency to sudden attacks of Cerebritis or Meningitis. The patient being suddenly seized with acute pain in the head and violent delirium. The pulmonary symptoms sometimes disappear for the time, and the patient is before long prostrate and breathless, starts out of bed and expires considerably strength. The cough, dyspnoea & seldom return until after the attack in the head has subsided. The two affections these alternating with each other. These are somewhat curious examples of the actual transition of disease. Some authors have even said that perfect recoveries have taken place in the advanced stages of Pityriasis by the intervention of an attack of Mania—A derangement of the functions of the urinary organs seems also to predispose and to excite to cerebral disease—such as "Ischuria renalis" which has often been noticed.
Are all Coup de J. cerebral?
to have proceeded serious cerebral derangement, when it ends fatally, effusion is found to exist along with marks of inflammation.

In many cases of this description, the patient complains for some days of a sense of weight and dull pain in the iliac region, this being usually followed by anxiety, restlessness, nausea, vomiting, hiccups, cramps, chilly pulse, muttering delirium, and coma, the urinary secretion in such cases being always much diminished, or sometimes entirely suspended. Cases have been described where the perspiration had a burning smell, it is easy therefore to understand that the blood in this condition should light up a serious action when it reaches the brain. Among other causes of these diseases may be mentioned, exposure to the intense heat of the sun in Tropical climates, which not only induces attacks of inflammation, but may also bring on mania, and apoplexy, with all its train of evils. This is termed "coup de soleil," recourse from which are very few in number, one very characteristic fatal case is recorded by
Dr. Abercrombie in his work on cerebral diseases, long exposure to intense cold in general produces symptoms indicative rather of congestion and a diminution of the functions of the brain than of excitement. Stimulating liquors as alcohol in any form, are well known to lead to cerebral disease, of which delirium tremens is a good example, when it proves fatal, appearances are found clearly indicating increased action of the cranial blood-vessels. Persons of intemperate habits are therefore known to be particularly liable to cerebritis and meningitis, and the resemblance between the symptoms of intoxication and apoplectic coma is so great, that it is frequently difficult to distinguish between them. The sympathies existing between the brain and digestive organs are too well known to require any comment. The sub-acute inflammation of the mucous membrane of the stomach and intestines (the gastric enteritis) of much writers, is frequently accompanied by cerebral irritations. In children (especially during dentition) this inflammatory affection of the mucous
membranes frequently terminate in coma, which is often preceded by a diminution in the secretion of urine – Dr. Robertson in his lectures stated that he has seen children recover, from what he considered decided symptoms of cerebral affections of an alarming nature, so suddenly and completely, after a copious unconscious stool, sometimes streaked with blood, that he could not doubt for a moment that the head affection was merely sympathetie with the intestines, which, like every other sympathetie affection is very obscure, but the importance of an acquaintance with such phenomena is quite obvious.

In the dissection of cases of acute hydrocephalus in young children, we sometimes meet with fistae suspteice in more than one part of the intestines – most frequently they are free from inflammation or of thickening of the parts, and appear to be of recent occurrence – This affection may be produced from inverted periattal motion of the intestines, by frequent vomiting.
In the cerebral affections of childhood, the incantations and improper administration of certain narcotic and irritating medicines are known to have caused cerebral irritation and inflammation. Alkaloids, strychnine, and its alkaloid, strychnamine, have sometimes when given for epilepsy or in the above manner brought on sudden attacks of the central inflammation.

It may not be out of place to mention here another very common cause of disease of the brain, which consists in improperly urging on the intellectual powers of children, especially those of a morose and constitutional disposition. Dr. Andrew Combe most satisfactorily shows that children so treated are either carried off by an acute disease of the brain such as hydrcephalus, or have their intellects so impaired as to render them nearly unfit for any mental exertion in after life. Besides he adds, "in the event of their attaining to manhood, this treatment entails on them feeble bodies, and a disordered nervous system, which subjects them to hypochondriasis, dyspepsia, and all the protean forms of nervous
Diseases. Encephalitis therefore is a most dangerous affection. The acute form may often be arrested at the commencement by judicious practice, but if the disease is allowed to gain head it generally goes on to a fatal termination. In the sub-acute or chronic form, the prognosis is more unfavourable, because the approach of the disease is insidious and it frequently has made considerable progress before being at all suspected.

In the treatment of the acute form of the disease, the most active measures must at once be resorted to, and rigorously followed up, the brain being such a delicate organ cannot bear much disease, and its power of recovery from idiopathic inflammation producing disorganization is less than that of the lungs or abdominal viscera. It differs from the last named organs in not being provided with resorptive ducts, which are known to carry off the products of inflammation, these arise also the greater amount of danger proceeding from idiopathic inflammation, than from that caused by external injury, called traumatic inflammation, when an
opening is found in the skull.

The principal causes of apprehension, are
inflammation of the serous membrane; and
effusion into the cavities. Inflammatory
excessive of the substance of the brain, congestion,
and apoplectic effusion. The treatment
therefore must be active, removing all the
ascertained exciting causes, and every source of
irritation, both bodily or mental—regulating
the diet, carefully avoiding all excesses.
Relaxation from study, or other mental
application, change of air, general or local
bloodletting, occasional purgation as Ditto—
erythema, Castor oil, and counter irritation.

When it is thought necessary, to relieve the
Brain from habitual congestion by occasional
topical bloodletting, it is recommended to
take blood from a distant part of the body,
in preference to the head itself, for instance
from the feet or legs by opening a vein, or
applying leeches to the arms. The abstraction
of blood ought to be repeated at certain intervals
according to the circumstances of the case;
this mode of depletion is not to be employed
during the acute stage of the inflammation.
but before the appearance of severe symptoms, their bleed from, or as near the seat of disease as possible—

Bleeding from a distant part has several advantages, among which may be mentioned that almost no fact is better established in medicine than that the loss of a very small quantity of blood from certain parts of the body, is sufficient to relieve distressing symptoms of congestion and depression in others most remote from them—As for example, the discharge of a few ounces of blood from the hemmoroidal veins being sufficient to relieve vertigo, headache, flushings, and oppressed breathing—The same is seen in the case of the Catarrhia, although uterine irritation may have some influence—

In persons of a plethoric habit, especially if threatened with any head symptoms, it (the head) ought to be kept cool by wearing short hair, and if necessary by frequently pouring cold water thereon, keeping the neck open and free, the head and shoulders well raised by pillows during sleep, the feet legs, and lower parts of the body,
dry and warm - The inception of an issue is often advisable in persons of this habit, with florid complexion, more especially, if they are subject to vertigo, headache, or to drowsiness - moderate exercise, attending particularly to the diet, avoiding all heating, stimulating, or rich food or drink, keeping early hours, constitute the best prophylactic measures, - but when the acute stage of the disease is manifested, the patient must be bled from the arm as largely as his strength will allow. Some have recommended the temporal artery or jugular vein as preferable to the arm to bleed from in this disease, but this seems doubtful for one or two reasons, the chief of which is that the pressure necessary to arrest the flow from the jugular vein would act very injuriously in aggravating the cerebral congestion - the arm is therefore generally used - but it may sometimes happen that the uncontrollable state of delirium of the patient renders it dangerous or almost impossible to bleed. An attempt must be made to meet this difficulty.
by dashing a few basins of cold water on
the head, and that in quick succession
should these measures procure an interval
of comparative tranquility, then evacuation
may be performed, but if anything like
collapse takes place upon the application
of the cold water, the operation ought not
to be proceeded with, until the patient
begins to recover, it is a powerful application
and one that should be used with caution.
In the convulsions of some of children it
very speedily acts in rousing the little patient
and should never be ordered unless the practi-
tioner or a skilful nurse is present to
superintend the operation.
Supposing the patient to have been bled
freely, the next measure is to cause a
derivation from the head by an active
and irritating purgative, which some say
is answered by a full dose of Colonel and
Salap, followed by saline purgatives;
The application of blisters should be de-
ferred until the vascular actions have
been diminished by other means, and
it will then be better to apply them.
to the extremities than to the head—Antimonials should be given to keep the skin moist, and the antiphlogistic regimen exactly enforced.

In the comatose and sinking state, very little can be done, the whole aim of the judicious practitioner being to prevent if possible the accession of this fearful state. By subduing the inflammation at first, it is possible however, that by bringing the system under the influence of mercury, we may sometimes check an incipient deorganizing process, or make an effort to promote the absorption of fluids that may have been effused. Throughout the disease, the position of the patient should be such as least favours the determination of blood to the head—

The sub-acute and chronic forms of inflammation of the brain, afford less chance of success to the practitioner than the acute. In these, active depletion is not called for, and if applied, would be injurious. The repeated abstraction
of small quantities of blood by the Lancing, Cupping, or Sucking, according to circumstances, continued counter irritation by blistering or setons—laxatives—attention to diet—and in some instances the cautious use of Mercury, constitute the means which are most likely to prevail—but as before said we cannot be sanguine of success in these cases.

The practitioners may meet with cases in which the already mentioned treatment will be successful, and with others in which the symptoms persist, in spite of the best treatment, the energies of life becoming more or less depriued. The pulse rapid, irregular, feeble, coma and stupor more profound, the temperature even of the head being much reduced. The may or may not have had recourse to derivatives, but in either case they must be continued and varied. For this purpose Camphor, much Valerian, Ammonia, as restoratives. If the pulsation of the carotide, and the temperature of the head be not in such cases increased, or if they be diminished
and the energies exhausted, both in the affected organ and throughout the system, then the above treatment will be inefficacious. Then the infusion of arnica flowers, or the infusion of potentarius, either simply or combined with cinchona, larger doses of camphor, with calomel & a small quantity of opium. When the structure of the brain is already seriously injured, and the disease irretrievably & fatal no harm can be done by the above courses, whilst in doubtful cases, and when the symptoms result from mere depression of the vital powers, the patient may be rescued, therefore, this chance in his favour ought not to be neglected. Much has been said and written on the foregoing subject, and much yet remains to be done before we can arrive at any satisfactory conclusions regarding the pathology and functions of the human brain, and even if we were possessed of the means of experimenting on it during life, the investigation would still be beset with difficulties, for as is observed
in the lower animals such experiments are necessarily accompanied with a severe shock to the system, and it is natural to conclude that the same result would ensue in the human subject to such an extent as entirely to defeat the object of surgery. Some have remarked that it is to be regretted that so little faith can be placed on the theory of Dr. Gall and Spurzheim, as regards the localization of the intellect or Phenology, as otherwise we might be considerably aided in our diagnosis of the diseases of certain parts of the cerebrum.

But, on the other hand, with all its difficulties, there is also a good deal in the pathology of the brain and nerves that is made out, and well understood, the proof of which is that many and valuable lives have been saved by a line of treatment based on principles so guided. There is therefore reason to hope that we are on the right way for advancing our knowledge of this most intricate and mysterious subject.
by that careful collection of facts, as well as rigid reduction of particulars, that will lead at length to a safe and useful generalization;—there can be but little doubt, also, that if other important conditions necessary to the health of the brain were more attended to than they are, that the frequency of diseases in it would be greatly diminished. Among these conditions may be mentioned that by proper exercise a requisite amount of oxygenated blood be sent to the part, and also that a certain amount of mental application is necessary, otherwise the patient is obnoxious to nervous diseases of a most serious nature, such as Melancholy, Hypochondriasis, and Hysteria in the case of females, even lunacy has been produced from the want of exercising the mind, all of which really depend on an irritable state of the brain thus induced, practitioners and patients however, are becoming more convinced of this, so that, if we have not the means of effectually treating cerebral disease when they do occur, we certainly have the means of preventing them, which at all times is better than cure.