1857.

Thesis

On

General Paralysis of the Insane

By

Alex. J. Campbell

1857.

Respectfully credit table essays accepted, accuracy, good composition. ++

In dex

During a few months residence with my friend, the Superintendant of the Lunatic Asylum for the County of Essex, I had an opportunity of witnessing several Cases of a disease, which, from its apparently trivial commencement, its almost invariable Course and its uniformly fatal result, early attracted my attention. I refer to that form of Paralysis called by French writers on the subject, by whom it was first described, Paralysie générale; by English writers General Paralysis or Paralysis of the Insane.

It is my intention, first to describe several of those Cases which fell under my own observation, and secondly to make some general remarks on the subject, illustrated as much as possible the Cases described and the Statistics of other Cases contained in the tables at the end of these pages as a means of illustration. Even by a superficial observation the great similarity of the Cases described will be apparent; still I may here remark once for all that they are not selected on account of their presenting any characteristic Phenomena in common, but that they are

are merely those cases which, through at least some part of their course, I myself saw, and which, by conversation with the officials of the Asylum and by searching in the case books, which were kindly placed at my disposal, I have been enabled in some measure to complete. I must here state my regret at the imperfect manner in which they are reported; but while they were under my observation I watched them more by with the view of ascertaining the distinction they conveyed, not with the intention of using them for any special purpose; and consequently the amount of assistance I derived from the Asylum Reports was necessarily small in an institution containing between 300 and 400 patients with but a limited medical staff. It is only those being connected with a subject in the Science of Medicine, where a personal experience, though limited and imperfect, is greatly superior to a knowledge more extensive and accurate derived from the experience of others that would induce me to insert them in their present state.

Case

Case I. Edward Fincham Aet. 47
Single, Labourer, admitted 27th Sept. 1853.

Had been a patient at Bow Street Asylum since 2nd November 1852. On admission was quiet and in good spirits, but his mind full of extravagant delusions; said he had millions of money and owned all his property Power &c. Articulation imperfect, gait unsteady and health feeble. After this his bodily health improved, he was cheerful, good humoured, easily managed and very industrious. About the end of the year 1854 he became liable to attacks resembling Epilepsy, and at the beginning of April 1855 he was for several days subject to Epileptic fits almost every hour, and quite lost the power of deglutition; able for a brief period after this he improved, could swallow his food well and was cheerful and happy; but he had lost the power of his left side and subsequently completely lost the power of his lower extremities; while his appetite continued good. About the beginning of March he had again a number of Epileptic fits, which succeeded one another so rapidly that there was scarcely an interval between them, and they left him in a state

of

of great exhaustion and quite prostrate. Eruptions soon made their appearance on his hips, he lost his appetite and gradually became weaker till the 3rd April 1855, when he died.

Case II. Isaac Moore.

A Criminal Lunatic, admitted 18th March 1854.

This patient had been sentenced to twelve months imprisonment for horse stealing and was brought to the Asylum from Jail. Nothing could be learned concerning his previous history. On admission he was quiet but his mind apparently much confused, his bodily health pretty good, but he had slight difficulty of articulation. For about a year after admission he was capable of employment on the grounds, but his mind gradually became weaker, he was liable to fits of excitement, his difficulty of articulation increased, his gait became unsteady; loosing also power to retain his urine and faeces, he became filthy in his habits, his bodily health became bad, he was very subject to diarrhea, could not sleep well at night; sores appeared on his

hips

hips and back as well as on his legs, which however were subsequently healed, his appetite continued good till the 19th. July 1854 when he had a severe convulsive attack which left him quite powerless and quite unable to articulate or swallow, he became gradually weaker and died the next day.

Case III. John Brown, Aet. 49.
Widower, Labourer, Admitted 4th. July 1854.

Was said to have been of a cheerful disposition and of quiet sober and industrious habits. His insanity first manifested itself about three months before admission, by considerable excitement and great incoherence, and was supposed to have been aggravated by a fall on his head from a hay stack. On admission his mind appeared much lost and he was very incoherent, laughed in a very silly manner, and betrayed considerable difficulty of articulation; His general health seemed pretty good. After this he became unsteady in his gait and his bodily health became bad; his mind became gradually more lost and he was unfit for any employment. While at times there was so

much

much improvement in both mind and body that he could work on the ground. Subsequently he was unable to retain his excretions and his faeces and urine passed involuntarily, his mind became still more weak and was full of delusions, he picked his skin, causing considerable ulceration, lost flesh and strength, the paralysis increased, he became noisy and restless at night; at length he lost all power of speech and voluntary motion; there was a great accumulation of mucous in his bronchi, which he was unable to expectorate; he lost all power of deglutition and on the 23rd December 1854 he died.

Case IV. Sarah Howe, aet. 48.
Wife of a porter, admitted 16th August 1854.

Was, when seen, considered a sober industrious person. Her insanity first betrayed itself about eighteen months before admission, by great confusion in her calculations in money matters with strangeness and irregularity in her conduct, by which she nearly ruined her husband. No cause could be assigned for the disease. On admission she was quiet and docile, though in conversation confused and bewildered

and.

and answered questions in a slow hesitating manner; her bodily health seemed good. Shortly after admission she had a slight convulsive attack and, about the beginning of September, had considerable difficulty of articulation and walked with a staggering and unsteady gait indicating the commencement of General Paralysis; Her habits then became dirty, She was incapable of any employment, her bodily health became feeble and her bowels subject to constipation. In February 1846 She had a convulsive attack which deprived her of the power in her lower extremities and left her bodily functions greatly impaired. After this the paralytic symptoms increased and she became more and more feeble and helpless, though at times so restless and noisy, striking herself against the sides of her bed &c., that it became necessary to confine her to a padded room; Her extravagant delusions remained; She raved of her property money &c and declared herself to be Queen of England, Though scarcely able to articulate, very feeble and perfectly helpless. She gradually lost flesh and strength, never slept without a draught of Camphor Mixture and Hyoscyamus, could not

turn

town in bed, large gangrenous sores appeared on her hips which, though daily dressed, continued to increase. By means of attention to her cleanliness and comfort, nourishing diet and stimulants, &c. &c. She continued to breathe till the 15th July 1854, when she died.

Case V. George Breeze. Aet. 50.

Simple, Coachman, admitted 21st Sept. 1854

Was a coachman in a gentleman's family for many years; his character was good, and till within a month before admission he was steady, sober and industrious; since then he had been restless and unsettled, at times giving way to habits of intemperance. His insanity first showed itself by his saying he had a letter right to his master's wife than his master had, and by his writing insulting letters to his superiors. On admission his mind seemed much confused, he appeared to consider himself a person of great importance, having of his property, power, wealth and influence. His general health seemed good, but he had much difficulty of articulation, a tremor was observable about the angles of his mouth, when asked to protrude his tongue he did so with difficulty, and ~~walked~~

he

he was unsteady in his gait. After this he became very destructive, tearing his clothes and bed clothes, and filthy in his habits. His legs and feet became oedematous, and he rapidly lost flesh and strength and became quite helpless; while his appetite continued good, and he was always in high spirits and full of whimsical delusions till the time of his death, which occurred on the 28th January 1855.

Case VI. Wm Lincoln, Aet. 34. Single, Shoemaker, admitted 8th Jan. 1855.

This patient was said to have been insane seven months previous to his admission, the ascribed cause of his insanity being long habits of intemperance. On admission he was in the last stage of general Paralysis; had great difficulty of articulation, was almost unable to walk and quite helpless, unable to retain his excretions, wasted very much lost, but still full of extravagant delusions, fancying himself possessed of large sums of money; bodily health bad, tongue foul, breath foetid, pulse much vitiated; quite unfit for any employment. After this, by means of nourishing diet and other remedies, his bodily

health

health improved and the paralytic symptoms seemed to diminish; but on the 5th. March he had a severe paralytic seizure causing complete loss of ~~power~~ sensation and motion. A blister was applied to the back of his neck but without any result, he became gradually weaker and died on the 6th.

Case VII. Robert Wildman, aet. 40.

Admitted 12th. February 1855.

Said to have first betrayed symptoms of insanity about six months before admission; and reported as having been known for many years as a man of very bad character and most intemperate habits. On admission was rather excited, and talked in a confused and unconnected manner; was in the last stage of General Paralysis, had great difficulty of articulation, was very unsteady in his gait, had an unhealthy look, tongue foul, teeth foetid, pupils dilated. After admission he was subject to fits of maniacal excitement, apt to strike his fellow patients, and very destructive to glass and furniture, was full of extravagant delusions, unable to be employed in any way; filthy in his habits, being unable to retain his faeces and urine. The paralytic symptoms

rapidly

rapidly increased, except for a brief interval when, by the usual treatment of nourishing diet and mild stimulants with attention to his comfort and cleanliness, he appeared to improve in mind and body. At length he became quite helpless and was confined to bed, rapidly lost flesh and strength, was rather noisy and sleepless badly at night; fungous sores appeared and rapidly increased on his back and hips. Still his appetite continued good till the last; he gradually sunk and on the 10th February of the year succeeding his admission he died.

General Paralysis was probably not known as a separate disease previous to 1826, when it was first described by M.M. Bayle and Calmeil; but after the writings of these eminent authorities were published it soon, from its well marked characters, began to attract the attention of those by whom, though they had cases of it constantly under treatment, it had not been previously noticed. No difference between General Paralysis and the common form of Paralysis is well marked; the latter may

appear

affect the muscles of a leg, of an arm, of the tongue, of one side of the body or of the lower extremities, or some other set of muscles, still it is always more or less limited in its extent; the latter, however slight and unimportant it may appear at its commencement, soon involves the whole voluntary system of muscles; hence the name general Paralysis.

Were we to consider diseases as important according to the danger to life which attends them perhaps there is none that would take a higher position in the scale than that under consideration, but fortunately this disease of the body is of comparatively rare occurance and it is only found as a complication of, if possible, a worse evil a diseased mind. I say it is only found with a diseased mind because, though exceptional cases of it are described where it is said there was no mental malady, still those exceptions are so rare, that even if they have existed which I conceive there is reason to doubt, they only go to prove the truth of the rule that General Paralysis is a complication of insanity; hence the name Paralysis of the insane often given to it in contradistinction to the ordinary forms of Paralysis, which

may

may or may not coexist with insanity.

Again it is universally believed by those who have studied the subject that in almost every case the commencement of the mental malady is antecedent to that of the bodily infirmity, although the latter may and frequently does very quickly follow on the former; but to this again exceptions are noticed by some authorities, M. Calmeil believes that the paralysis sometimes precedes the mental aberration and that distinguished French Psychologist M. Esquirol describes an instance of this; on the other hand the paralysis may not begin till the patient has been many years insane. In the cases described the fact that generally only a brief time intervenes between the commencement of the insanity and the paralytic symptoms is well exemplified; When Lincoln had been only seven months insane and was already in the last stage of General Paralysis; When Crane had been only three months insane and his articulation was already affected; George Bruce had been but a month insane and he had the difficulty of articulation and unsteadiness

in

in his Case, the first symptoms of General Paralysis; in the Case of the female patient Sarah Howe alone had the interval exceeded one year. But in searching the Case Books of the Asylum I found the cases reported of several patients who had been many years insane before their articulation became affected, thus, for example, one man John Chandler, (No 12 Table I), had been ten years insane, and Thos. H. Tanner, (No 19 Table I), eleven years. I have not met with any one who had seen a case in which the paralytic preceded the mental symptoms. But our knowledge on this point must necessarily be imperfect, seeing that patients are rarely brought to an Asylum when their disease first appears, and it is almost invariably on account of the mental malady that the Physician is consulted, while the first symptoms of the General Paralysis, whether or not they have chanced to precede it, have been overlooked by the patients friends or its ~~little~~ trivial nature considered of ~~little~~ importance.

I am inclined to think, from the large number of patients who are brought to Asylums when they have been a few months insane and then presenting paralytic symptoms, that

in

in many cases the mind and body become simultaneously affected; and that instead of looking on the Paralysis of the disease as a separate disease, we may consider it rather as just a step in that disorder and annihilation of all the functions of the brain characteristic of the different stages of insanity.

From the facts last indicated it must be clear that to the General Practitioner this disease cannot be so well known as to the Superintendant of a Lunatic Asylum; and there are several other circumstances which combine to render the diagnosis of the former liable to imperfection. In the first place, in the lecture rooms of our medical schools we hear little or nothing about it; in our Hospital attendance we necessarily see nothing of it; and it is only by the small number who, either from choice or to qualify themselves for some Public Service, attend the Clinical instruction of a Lunatic Asylum that it is seen at all.

Yet to the General Practitioner its diagnosis is not altogether unimportant, although he may rarely meet with it still he is always liable to be consulted, if not about the Paralysis itself

itself, at least about a case of insanity complicated with the paralytic. Some days ago, in perusing the report of one of the English Asylums, I met with the account of a case highly illustrative of this; a patient was brought to that Asylum, a man in respectable circumstances, he was accompanied by his medical attendant, despairing hopes of recovery and been left out, the insanity was recent and the patient in the prime of life, was mental vigor and bodily; his wife and family anxious for his speedy restoration had at a great sacrifice to their feelings consented to his removal from home under the assurance that a few months would restore him to health and usefulness. Here a principal task to dissipate all their high hopes and to portray to the weeping relatives a career of insanity terminating only in death; but alas the first indications of this fell disorder were too apparent to the Superintendent experienced in such cases, and the interests of the patients relatives equally with the reputation of the Asylum required that the truth should be told. The result was that

a

a business then flourishing could be brought at once into the market, instead of being suffered to dwindle into insignificance under the vain hope that in a few brief months its proprietor would be able to resume it again.

Now, when it is considered that this disease is not only one of the most common, but certain by the most fatal of all the complications of insanity, a knowledge of it by medical men must evidently be very important as well for the good of society as for the credit of the profession. There is probably no institution for the insane of any extent which does not contain cases of it, and I believe there is no other single disease that so invariably swells the mortality of those institutions; from an examination of the obituary of the Ohio Lunatic Asylum for 1858, while the number of patients under treatment was 489, (as shown in Table III), I find that the number of deaths from General Paralysis during the year was 16 and from all other causes combined 62; so that, according to this years report, the deaths from General Paralysis would be nearly 20 per cent of the whole mortality, and this estimate of the proportion

proportion of deaths from General Paralysis for that year is enormous, the causes of the 62 deaths from other deaths ~~causes~~ 17 were from Asiatic Cholera which cannot be regarded as one of the ordinary causes of death in such institutions. Again for the year 1866, when there were 436 patients under treatment, the obituary of the same Asylum shows the number of deaths from General Paralysis to be 8 and from all other Causes 40, so that the proportion from General Paralysis for that year was 16.6 per cent. And in the obituary for the Derbyshire Asylum for 1865 I find that, while there were 277 patients under treatment during the year, 13 had died from General Paralysis and from all other causes only 15, which gives the enormous proportion of 46 per cent of the deaths from General Paralysis. Now, although these few instances do not afford sufficient data from which to draw any general conclusion as to the proportion of deaths among the insane who are caused by General Paralysis, while they are sufficient to show that that disease is very common and very fatal.

Having now sufficiently exemplified the importance of a correct diagnosis of this not

not uncommon and inevitably fatal disease with a view to a correct prognosis, I will proceed to make a few remarks as to the means of attaining it. In the diagnosis of the Paralysis of the Insane we are assisted not only by the symptoms of the bodily infirmity but by the peculiar nature of the delusions of the insane mind; and as it is concerning the latter that the Physician is almost invariably consulted it may be proper that it should first be considered. It is a strange and interesting fact that in cases of General Paralysis ~~that~~ the mental delusions should almost invariably assume a peculiar form namely that of pride. Rich however may be modified in many ways. Perhaps, especially at the commencement of the disease, the patient may be merely a little more sanguine or boastful than usual, or like Sarah Howe become extravagant and if unchecked reduce them friends & the verge of poverty; Again the diseased fancies of others or of the same patient when the disease has further advanced may take a higher flight. They may fancy themselves gifted beyond ordinary mortals, a man may suppose that he is the

Saviour

Well describes the nature of the insane delusions as generally witnessed — pride, wealth, dignity, &c. But these paroxysms commence suddenly with violent maniacal outcries, soon yielding into depression which never wears off during the 2 or 3 years.

Saviour of the World or a woman that she is
Queen of Heaven; others may be content with an
Earthly sovereignty, I recollect one poor female
patient in the Essex Asylum who considered herself
Queen of England and possessed of the County of
Essex and enormous wealth; another again
like George Bruce may consider himself entitled
to move in a Sphere beyond that for which he
was born or, like Isaac Moore, may consider
his neighbours property his own and pass
to the Asylum through the hands of the law.
But the most common delusion of any
is probably, as in the case of John Lincoln
and Edward Fincham, that of possessing
~~immense~~ power, wealth and influence, of
being immensely strong or of great height.
But it would take long to enumerate all
the various forms these extravagant de-
lusions may assume, and the above are
sufficient to indicate their nature. It is
not to be wondered at that these poor lunatics,
supposing themselves possessed of these various
privileges and not being harassed with the
cares which attend them, should be ~~in fact~~
happier, cheerful and contented as they
almost

almost invariably are; or that, when they consider themselves debarred from the enjoyment of those privileges and do not receive from those about them that tribute of homage and respect they consider their due, they should be subject to occasional fits of morbid depression or of maniacal excitement.

Now in turning our attention to the symptoms more properly indicative of the paralytic state, namely those which are presented by an examination of the bodily condition of the patient, we find that they are equally well marked with those presented by the mind. The first indication which presents itself of this state is a peculiar tremor about the angles of the mouth and a slight tardiness of articulation; the patient seems to have a difficulty in forming the words, the time between the syllables is prolonged, there is a hesitation rather than a stammering in his speech. This is quickly followed by an imperfection of the limbs, when he attempts to walk he appears to have a difficulty in progression, a want of command over his limbs, they appear to drag behind him,

he

does not plant his feet firmly on the ground, this appearance may be at first slight but by the experienced eye is at once detected.
When asked to show his tongue he appears to do so with difficulty, the muscles seem not to obey the mandate of the will, he protrudes it by successive jerks and I have seen in advanced stages of the disease that it was only by successive efforts he could protrude it at all. But I need not describe the further symptoms while the course of the disease is under consideration; for a direct diagnosis the lisping in the speech and the difficulty of progression are alone sufficient, and if there be combined with the particular forms of delusion already described we may safely aver that this hopelessly fatal malady has already commenced.
I may add that these symptoms are often preceded by a fit of unconsciousness more or less prolonged, which, if reported to the Physician, must with respect to his diagnosis "make assurance doubly sure"; but even without this additional indication he may at once inform those interested in the patients welfare

that

that the Case is hopeless. But in the majority of cases, especially among Pauper patients, the disease is much further advanced before they are brought to an Asylum at all and the preceding history of the case is buried in obscurity. It is then, like John Lincoln, in a state of complete helplessness, the mental faculties completely deadened and unavoidably filthy in their habits, they become a source of expence and trouble to their friends or a nuisance to workhouse authorities they are brought in a few brief weeks to end their days, there, if it was impossible to effect a cure, still if they had been brought then the insanity first manifested itself they might have survived, perhaps for several years, surrounded by all those comforts and conveniences which by the hygienic regulations of such institutions are so liberally bestowed on the meanest of their inmates. The truth of this remark will appear from the fact that of the 24 patients noticed in Table I as having died of General Paralysis in the Essex Asylum since that institution was

opened

spend in 1853, two only were free from paralytic symptoms at the time of admission and in many of the others that disease had reached its final stage; hence the fact may be accounted for that few of those patients continued to survive for the average length of time generally allowed for the disease to run its course as shown in Table I.

If the incipient symptoms of General Paralysis are invariable, the course the disease runs is scarcely less so. It is true that in different cases it may vary somewhat in the complications and in the time which elapses before its termination in death, but these differences are generally such as can be easily accounted for by differences in the constitution of the patients and in the external circumstances by which they are affected: as a rule we may say that General Paralysis commences by an affection of the muscles of the tongue accompanied by the particular monomania as already described, that the paralysis gradually involves the whole voluntary system of muscles, while the insanity passes into a state of chronic dementia; the patient becomes perfectly helpless and irremovable

and

and at length, some of the abdominal or thoracic viscera becoming affected, the derangement of some of the organic functions ensues.

Having thus carefully indicated the general course of the disease, I will now describe it more in detail, taking notice of those slight variations and complications which it must be allowed do exist in individual cases. Even after the difficulty of articulation has become apparent the patient may, under the proper hygienic and dietetic treatment and remedies, remain very long presenting any further symptoms of the malady, as we have seen exemplified in the Case of Isaac Moore whose speech was affected for about a year before any unsteadiness in his gait could be detected; but this is a rare case, and we generally find that the paralysis of the muscles of progression almost immediately follows that of the muscles of articulation; and it is much more common to see the patient continue with not only his paralytic symptoms not ~~only~~ increased or even diminished for a period more or less lengthened after the affection of the lower limbs,

indeed

indeed in the majority of cases which are early placed under the superintendance of an experienced guardian we find this to be the case, and that those patients are in this stage of the disease capable of employment more or less arduous, and are then enabled to take that exercise so conducive to health of body and peace of mind - However it is only perhaps for a year or even two, but much more frequently for a few months, that with the greatest care the paralytic affection can be thus delayed; it gradually pursues its course, the arms of the patient exhibit a certain stiffness, the hands a want of power, the skin has a tendency to rest on the bed and even in the sitting posture the patient appears ill at ease, the muscles of the back and loins performing their function badly, often from paralysis of the sphincters or want of attention on the part of the patient the secretions escape unnoticed and he becomes filthy in his habits. The mental malady increases rapidly passing into a state of dementia in its most aggravated form - Still the special senses

sight, hearing &c appear unimpaired and the functions of the merely Physical life may be unaffected, the appetite and digestion good, the flesh firm and plump, and the sleep sound, and under the proper treatment the patient may still ~~sufficiently~~ recover ~~to~~ to be fit for employment, as in the case of Isaac Moore. But when the last stage of the disease is reached the patient is perfectly helpless and quite insensible, often unable to continue in any but the recumbent posture and apparently unconscious of any thing that is going on around him, and, although as in the case of Robert Wildman the appetite often continues good till the last, the bodily health becomes bad, the corpse is found to be foul, the breath foetid, the pupils often dilated; but even now, by the administration of nourishing diet and stimulants, we occasionally see a patient improve in mind and body, but such cases are rare, his mental faculties being quite lost and his bodily health seriously impaired, the patient seems to undergo a slow process of dying - He is often as in the case of Isaac Moore subject to diarrhea, or

on

on the contrary like Sarah Howe to constipation of the bowels; but these derangements of the primae viae may happen at any stage of the disease, so can also the convulsive attacks which, as in the cases of Isaac Moore and John Lincoln, often occur, or the more rare complication of Epileptic fits which we find in the case of Edward Dickman. But these latter complications are much more common in the advanced stages of the disease and seem a bit of unconsciousness occurs it is most deliterious, invariably leaving the patient in a worse state both of mind and body than it found him, and, as sufficiently illustrated in the cases described, hastening the onward course of a disease which at its greatest length must be of short duration. There are also slight variations in the mental phenomena exhibited by the patient; some like Robert Wideman are subject to fits of maniacal excitement, or like John Dean and Sarah Howe are noisy and restless; on the other hand they may become quietly depressed and moan or weep. While they appear in general to be happy

and

and contented to the last; the want of nervous energy is so great that they appear not to feel their bodily ailments, and their mental powers are so reduced that they cannot appreciate their helpless condition. May on the contrary, it is often strange to witness a poor creature whose life is reduced to the lowest stage at which he can be said to exist, as in the case of Sarah Howe and Dan Lincoln, or even till death itself like George Bruce, showing indications of the persistance of those extravagant delusions characteristic of the first stage of the malady.

It might be expected that in this disease the immediate cause of death would be the gradual loss of nervous energy, but though this soundly reduces the unfortunate party to a state closely resembling death as far as his relations to external objects are concerned, still that, which may be described as a mere state of vegitation, would seem often to be terminated rather by a derangement of the organic functions resulting from the derangement of the nervous system. And this is easily explained when we consider

that

that great and as yet unsatisfactorily accounted for influence which the nerves of a part have over its nutrition, and that when this influence is removed or greatly impaired, the processes of assimilation and nutrition being in abeyance, the part must suffer organic change, and being thus disabled for the performance of its function in the economy results on the system causing death. This organic lesion of important parts was well exemplified in the case of Dawes Fidley (No 2 Table I). in the post mortem examination of whose body an ulcer about two inches long was discovered in the descending portion of the duodenum and the ascending and transverse colon was studded with ulcerations some of them extending into the muscular coat.

Nor is it only in the internal organs that we find a change of structure but also on the surface of the body which is very liable to ulcerations, especially in advanced stages of the disease, when the nervous energy is most impaired and the patient most helpless and filthy in his habits. The sores formed sometimes resemble the ordinary bed

sore

sore, the result of continued pressure and
worinous beds; but in most cases the term
bed sore cannot be strictly applied to them;
they rather resemble, as remarked by Dr. Buckmil,
"in some cases traumatic gangrene in some
the dry gangrene of the aged or mortification
following injury of the spinal cord, and like
the latter may be described as the result of
diminished nervous energy lessening the
vital powers of the part and thus causing
its decomposition before death." As W. Pagit
observes in his lectures on mortification,
"Lastly we may enumerate among the causes
of death of parts the defect of nervous force"
"When a part is severely injured ~~the part~~ the nervous ~~part~~
proportionate violence, and this defective force
may add to the cause of mortification in the
old; not the blood alone or the tissues are
degenerate, but the nervous structures also;
and defective nervous force may be in them
counted among the many conditions favor-
able to senile gangrene, and so we more
evidently the sloughing of compressed parts
is ~~more~~ particularly rapid and severe, when
these parts are deprived of nervous force,

by

by injury of the Spinal cord or otherwise."
Now although the cases of Paralytics are common over the region of the Sacrum, of the great Trochanter and of other Bony prominences, still they are by no means invariably found over those regions; but often on those parts where the fleshy cushion is greatest as in the Gluteal and Lumbar regions, and although continued pressure and friction may pretty contribute to their production, still they are often found on parts exposed to neither of those influences as in the case of Isaac Moore when they existed on the Legs. Sir Benjamin Brodie in his lecture on bed sores says that, "Patients are more or less disposed to mortification as they are more or less emaciated; a man with a cushion of fat between the skin and sacrum or the skin and great trochanter is in less danger from such mischief than another person". Although this may hold good with regard to ordinary bed sores still it is by no means applicable to that particular class of sores now under consideration. Indeed in some cases it would seem to be exactly the reverse. I am com-

faithfully

paratively much more common in those cases of General Paralysis where the course of the disease has been rapid and the nervous energy greatly diminished before great emaciation has occurred. In such cases the patient is fat and heavy, the animal juices abundant and the vessels of the part full, while the nervous influence is reduced to a minimum. These circumstances render the existence of extensive gangrene inevitable and in such cases it is moist, deep, strongly resembling traumatic gangrene and is quite incurable, no line of demarcation forms and no slough separates, the mortification spreads and the patient never survives beyond three weeks or a month at the longest. Luckily those cases of moist gangrene from the rapid progress of the disease are rare in late years. In consequence of the rapid advance in the physical and moral means of alleviation of all forms of insanity, among others that complicated with General Paralysis, the course of the disease is now generally of greater length than formerly, and the loss of nervous energy is retarded while the tissues and juices of the body are proportionally

diminished

diminished; and it would appear that an amount of nervous force insufficient for the maintenance of the normal textures of the body in a state of health ~~are~~ sufficient for that purpose when it has become emaciated and its ~~tissues~~ juices dried up by a long and wasting illness. But even in protracted cases as in that of Robert Wilkinson gangrenous sores are still common, but they are not of the same formidable and incurable nature as the worst forms already described; on the contrary they are dry, superficial, sloughy assuming gangrenous similes and are often capable of cure, a line of demarcation forms and a thin dry slough separates, healthy granulations appear and the sore heals; And not only does the sore itself heal but we find other accidental breaches of surface also to heal, thus I remember one man recovering from a severe scald of both legs half way up to his knees and of one hand, which he had accidentally received by stepping into hot water, while he had gangrenous sores over the sacrum and hips - And we occasionally find that even while the sloughing out of sores is going on in some parts

of

of the body the patient is recovering from acci-
dental injuries of other parts. It is a singular
circumstance that while there is insufficient
nervous energy for the maintenance of the
normal tissues of one portion of the body there
should be sufficient for the reparation of
lesions of another part. Now there comes sick
whether moist or dry appear to an observer as
distressing seem to cause little or no incon-
venience to the patient, and in cases of the
moist form of Lanpeus we find paralytic
patients continuing to live for several weeks
with an extent of ulcerating tissue which
if occasioned by an accidental injury to a
healthy man with his nervous system entire
would have occasioned death in a few days:
And both these phenomina appear to be occa
sioned by the same perversion of the nervous
system as caused the death of the tissue and
the production of the core. It would seem that
that want of nervous energy which prevented
the tissues retaining their normal condition,
when their degeneration has advanced prevents
that reaction on the system which would
occasion pain in the one case and rapid

death

death in the Ulcer. This is a pathological doctrine capable of throwing great light on the physiology of the nervous system, as indicating not only the remarkable influence the nerves of a part have over its proper nutrition but also their effect in hastening the deleterious actions which local affection sooner or later exercises on the system. The want of nervous influence alone is generally looked upon as the cause of these sanguineous cases in patients suffering from General Paralysis, and taking into account the similar result following injury of the spinal cord & the parts below such injury, and also following the destruction of a nerve to the parts supplied by that nerve, I think there can be no doubt of it being the chief cause, at the same time there appears to be some peculiarity of the system or of the part giving a tendency to such cases. If there is no peculiarity of the system why should there be the case in the case of one patient and not in that of another supposing them an equal or perhaps greater want of nervous energy, and receiving the like care

and

and treatment? if no peculiarity of the part
they should one portion of the body be liable to
sores and another, equally paralyzed and
subject to the same pressure and other ex-
ternal agencies, not liable, or it may be
even as in the case of the patient mention-
ed above recovering from the effects of a
severe scald or other accidental injury?
Now we must not think that because
these sores do not occasion pain to the pa-
tient they are harmless, they must sooner
or later exert a baneful influence, and
their occurrence must if possible be prevented
by supporting the system by means of nourish-
ing diet, attention to the cleanliness and
comfort of the patient, keeping the body dry
avoiding continued pressure on any one point,
by means of frequent change of posture, water
beds and other appliances, or, if the latter
indication is impracticable, by hardening
the skin of such ~~portion~~ by the applica-
tion of lotions, and by keeping up that
proper amount of heat so necessary when
there is a tendency to sloughing - Perhaps I
have dwelt longer on this simple complication

of

of the malady under consideration than it may seem to deserve, but from the great interest in a Physiological point of view I could not pass it over in a cursory manner - and I think it but fair to add that I am indebted for many knowledge on that point chiefly to the admirable paper of Dr. Buchanan "On Bed-sores occurring in the Insane, or Asthenic Lumpeni" published in the Asylum Journal of March 1854.

Almost all authorities are agreed that the result of General Paralysis is invariably death, however this belief is not quite universal, for instance Dr. Calmeil reports two cases of recovery, and we occasionally find that patients believed to be cured are discharged from Asylums; but this is seldom the case and it is ~~possible~~ probable that in every instance ~~case~~ the change for the better is merely temporary and that the patient when he returns to his old habits and is deprived of that watchful care and necessary treatment which produced the favourable change is soon revisited by his old delusions, and relapsing into his state of General Paralysis is either

brought

brought back to the Asylum probably in a worse condition than he was on his first admission, or speedily under his charge; and I believe any Superintendant of a Lunatic Asylum to be highly Culpable who, if he can possibly avoid it, permits such a patient however weak advantage he appears to have obtained to escape from that watchful surveillance by which alone such improvement was effected and is temporarily maintained; and if the friends of the patient should insist on his discharge the hopeless nature of the case should be explained to them and the responsibility thrown entirely on their shoulders.

The progress of the Malady under consideration is very rapid in some cases, in others prolonged over several years. Dr. Calmeil says that the mean duration is 13 months, Dr. Esquirol that it is from 1 to 3 years, that he had never known a case extend over 3 years. But now, either from improvements in the General Hygienic conditions of Asylums or from other causes, some exceptional cases are met with who survive for 4 or even 5 years. I believe that the average

time

time may be stated at from one year to eighteen months, which is below that generally stated by recent authorities, but there must be a difficulty in arriving at certainty on this point, because as I before remarked patients are rarely brought to asylums at the commencement of the disease and often not till it has reached its last stage: and this I conceive to account for the fact that of the cases given in table I. of patients that have died of the disease in the Essex Asylum, counting from the date of admission till the date of their death as the duration of the disease, the average time is considerably below even that which I have stated, for as I before remarked only two of those patients were free from paralytic symptoms on admission. On examining the table referred to it will be seen that though No. 27 lived for about three years No. 24 for nearly a year and a half and several others for nearly a year, still the great majority died in considerably less than a year and many in less than half a year or 26 weeks from the time of admission.

Again in referring to Table II, we find that of the patients who died of this disease in the Derbyshire Asylum during the year

1855

1855, though one patient No. 1. had lived for about one year from the date of admission and Nos. 8 & 10 for more than a year, still the greater number in this case also were below the average time stated; and here I may remark that the superintendant of that Asylum complained bitterly in his report for that year that patients with general Paralysis were seldom placed under his care till the disease had far advanced. Taking these circumstances into account I have stated as the average duration of the disease a time intermediate between that usually stated from 1 to 2 years and the much shorter time which my limitted experience would seem to indicate.

Concerning the ages of patients I can do little more than refer to the column of ages in Table I. Of the 28 patients there were four from 30 to 40 years of age, six from 50 to 60, five from 60 to 70, while more than half or fifteen were from 40 to 50, only one had exceeded 70 years. I have been able to gather little further information on this point; but from the ages of patients whose cases I have found recorded in books and from the above I am inclined to think that if this disease occurs at all in

in the young it must be very rarely, and that it is much more common in persons of middle age than in the old; I believe many more are attacked by General Paralysis at from 30 to 50 years of age than at all other ages combined; while it is not unfrequently found even in persons who have attained the three score years and ten allotted for the existence of man, three we see one patient No. 19. Table I to have attained nearly four score years, and I can fancy the disease occurring in persons of advanced years being often mistaken for the lingering speech, the tottering gait, the growing imbecility and the natural decay of old age.

With regard to sex there can be no doubt that it is much more common among males than females, indeed some authorities doubt whether it is at all found among the female sex. Perhaps the Superintendant of the Derbyshire Asylum entertains doubts of this nature for it will be seen ~~Table~~ in Table III that according to his report for 1855 thirteen males and but one female had died of General Paralysis during the year, while the number of females under treatment exceeded that of

males

males. But when we find female patients in whom the symptoms of the disease are so well marked as in the case of Sarah Howe there can be no doubt that this opinion is erroneous.
On the other hand in the same table the number of females we find as having died of General Paralysis in the Essex Asylum is perhaps in comparison with that of the males greater than common, then we find that in 1864 there were 4 females and 12 males while the number of female patients under treatment was 235 and of males 204, Thus, making allowance for the difference in the number of male and female patients under treatment, we would have the number of females to that of males for that year to be as 1 to 5: and again for the year 1865 a similar calculation gives the number of females to that of males as 1 to 4. I am inclined to think so large a proportion of females is not common and that perhaps the proportion would be nearly correctly stated at one female to six or perhaps seven males.

It would be of importance to discover with certainty what are the exciting causes of General Paralysis or rather of Insanity

Complicated

Complicated with General Paralysis, but as yet this point is very obscure; There are few authorities but acknowledge they have not sufficient data from which to come to any general conclusion on the subject, and those few who make the attempt are so apt to contradict one another that they leave the subject in greater uncertainty than they found it: There we find one explicit writer on General Paralysis Prichard ascribes most of the cases to intemperance and sexual excesses, while Dr. Conolly in his lectures published in the Lancet in 1846 considers this opinion erroneous, and that on the contrary General Paralysis is most common in cases of insanity arising from moral causes, meaning by moral causes to use his own words, "Violent impressions made on the mind disturbing the sentiments and affections and often leading to misgovernment of the propensities". On consulting Table I. it will be found that out of 28 cases there are only six in which any cause was assigned for the insanity and in three of these the assigned cause was intemperance, one was said to be congenital, one from Epilepsy, and only one from any of the so-called moral causes. Now if we were foolishly

to

to draw any inference from those few cases it would clearly be that the chief cause is intemperance; but supposing even that intemperance did precede the commencement of the insanity have we any right to look on that as certainly the cause; perhaps it might be, but I conceive that it might in very many cases be the first result of some of the so called moral causes, perhaps some hidden grief unknown to any one but the patient himself and from which he was vainly seeking relief in habitual intoxication, or may not this bad habit have been the commencement of that "misgovernment of the passions" which Conolly mentions in his description of what is meant by moral cause, the "result of some violent impression made on the patients mind". Again if excessive intemperance did frequently precede the insanity I conceive that it would in many more cases than it is, whether rightly or not, be ascribed as the cause of it. If a man was seen several times in a state of intoxication and afterwards became insane it is more than probable that intemperance would be assigned as the cause of his insanity. It is a phenomenon which, unlike a sudden fright, the disappointment of some

disappointment

Caspian Rope, a recent fright or the bitter pangs of remorse or other common cause of insanity would be apparent to many, and for diseases of the mind as of the body people are always ready to fix upon some cause and if one so convenient as habitual intemperance was before them they would not consider it necessary to seek further nor hesitate to seize upon it especially if no other cause was apparent. Thus for instance in the case of Geo Breeze we find intemperance assigned as the cause of his insanity although those who brought him to the Asylum allowed that till within a month of that date he had been of sober habits. But we find in Table I that there was no other cause assigned for the insanity of 22 patients and still intemperance was not assigned, are we with them entitled to conclude that at least in the great majority of these cases habits of intemperance did not exist? and does it not follow that we are entitled to have strong doubts as to ~~Intemperance~~ such habits being the principal cause? Again a common argument of those who advocate intemperance and sexual excesses as the chief cause is that the greater number of females who are attacked by general paralysis are prostitutes. We find none of the six female patients noticed in Table I described as belonging to that

that unfortunate class, on the contrary they have all been married women, and the fact that this Asylum is not 20 miles from London may add to the significance of this remark. Now when we find that out of 28 Patients there is not even an assigned cause for the insanity of more than six it must be very difficult to come to any positive conclusion on the subject. Like upon the whole I am inclined to think that the opinion advocated by Conolly is more correct than that of Prichard. I believe that physical causes by which I mean intemperance and sexual excesses may sometimes be the cause, but that insanity complicated with Facial Paralysis much more frequently arises from moral causes. As to whether it is ever due to a hereditary tendency I have no means of ~~determining~~ forming an opinion. A consideration of the class of persons most frequently attacked by it might be expected to throw some light on the exciting causes, but it would seem to be found in all classes of ~~community~~ society and by an examination of Column 5 in Table I. it will appear that at least in the lower classes who alone are treated in this Asylum no particular calling is more liable to it than others.

Two points remain still to be considered in relation to this disease, namely the pathological cause as deduced from post Mortem examinations and the mode of treatment employed with a view to its alleviation.

First I would briefly describe what is supposed rather than what is positively known as to the organic lesions which necessarily accompany it; for as in the greater number of nervous diseases so in this the pathology is still obscure and the opinions of writers on the subject various. This might be expected to be the case when we consider that there are two affections, that of the mind and that of the body, so completely interwoven that it is impossible to say what organic lesion may be the cause of the former, that of the latter, that of both, and that many of the lesions discovered are known to coexist with other morbid states of the nervous system.

I have had little or no opportunity of investigating this subject for myself, and on consulting books on the subject I found I could draw no conclusion from the various and contradictory opinions they contain.

I

I will therefore proceed to set forth in a brief and general manner the opinions of those authorities who have devoted much attention to the subject. "General Paralysis", (says Esquirol), is often indicative of inflammation of the meninges and must not be confounded with those paralytic affections which are the consequence of cerebral hemorrhage, of cancer or tubercles of the brain or of ramollissement of that organ".

M. Bayle holds the same opinion; he considers that the phenomena are all due to the compression of the brain, the result of effusion arising from inflammation of the membranes. According to this writer, "the progress of paralysis and dementia indicate a corresponding increase of cerebral compression. The state of stupor with obliteration of the faculties and ideas and the existence of paralysis in the most aggravated form are due to the compression of the brain from serous effusion now attaining its greatest degree". This view is opposed by M. Calmeil. Although he describes as one of the most striking and uniform ~~symptoms~~ lesions the existence of a quantity "of serosity in the cavity of the arachnoid varying from 6 to 8 oz. and

and also in the ventricles of the brain, still he does not give the same weight to this as M. Bayle does. The reasons on which he founds this opinion are the following; 1. He found the serous effusion existing in strongly marked cases. 2. Similar effusion has been found to exist in ~~general~~ Dementia without General Paralysis. 3 The symptoms do not always correspond to the amount but often the reverse occurs. 4. If the compression was equal the structure would be more injured. 5. In chronic Hydrocephalus of long duration the quantity of serosity is enormous, still there is no loss of locomotive power till it has reached the last degree. 6. If the compression acted mechanically it should affect all the nerves equally, not those of the tongue first, those of the lower limbs next, and so on. He does not therefore think that the General Paralysis is dependant on the pressure of the effusion but on the condition of the encephalon giving rise to the effusion, and chiefly to inflammation —

The other lesions described by Calmeil agree in leading particulars very much with the following said by M. Bayle to have

have excited in 100 bodies examined by him, and which he considered were characteristic of chronic inflammation of the membranes. The appearances always met with were opacity, thickening & increased tenuness of the arachnoid, extreme congestion of the pia mater, thickening of the arachnoid of the ventricles which also was covered with granulations, considerable effusion of serum into the cavities of the ventricles and into the network of the vessels of the pia mater. The appearances less frequently met with were adhesions of the membranes and softening of the substance of the convolutions, false membranes and extravasated blood. The substance of the brain was softer in a few cases, in some it was firmer, in the majority it retained its natural consistance — Now these appearances existing, the slight value of the most of them as indicative of the causes of general paralysis will be apparent from the following brief summary from a paper by Dr. Chas of Morningside Published in the Journal of Psychological Medicine, October 1856, where he describes the morbid appearances

found

found in the brains of 411 Lunatics, 6 of whom had General Paralysis, and showing what lesions and how large a proportion of these lesions were common to General Paralysis and other forms of Insanity.

1 Calvarium thinner than usual in 9 cases, 2 of these having General Paralysis.

2 Abnormal adhesions of the Dura Mater to the Calvarium in 4 cases, 1 of General Paralysis.

3 Abnormal adhesions of arachnoid to Dura Mater in 4 cases, 1 of General Paralysis.

4 Serous effusion in the sac of the arachnoid in 22 cases, 6 of General Paralysis.

5 Extravasation of blood into the sack of the arachnoid in 2 cases, 2 of General Paralysis.

6 Organized lymph in the sac of arachnoid in 1 case, 1 of General Paralysis.

7 Opacity and thickening of the arachnoid in 26 cases, 4 of General Paralysis.

8 Granular deposit in arachnoid in 2 cases, 2 of General Paralysis.

9 Congestion of membranes in 12 cases, 4 of General Paralysis.

10 Subarachnoid effusion in 22 cases, 6 of General Paralysis.

adhesion

11 Adhesion of Membranes to Cortical Substance in 3 cases, 3 of Lunacy Paralysis.
12 Paleness of Grey matter in 17 cases, 2 of Lunacy Paralysis.
13 Grey matter of violaceous tint in 5 Cases, 2 of Lunacy Paralysis.
14 Grey matter of yellow tint in 2 cases, 1 of Lunacy Paralysis.
15 Grey matter softened in 2 cases, 1 of Lunacy Paralysis.
16 Grey matter presents limited yellow softening in 3 cases, 1 of Lunacy Paralysis.
17 White matter softened in 2 Cases, 1 of Lunacy Paralysis.
18 Punctae Vasculosa very numerous in 15 cases, 4 of Lunacy Paralysis.
19 Serous effusion in Lateral ventricles in 16 Cases, 4 of Lunacy Paralysis.
20 Granular deposit in the membrane of the Lateral ventricles in 3 cases, 2 of Lunacy Paralysis.
21 Cystic bodies in the choroid plexuses in 4 Cases, 3 of Lunacy Paralysis.

Many of the authorities I consulted describe the substance of the brain as softened in Lunacy Paralysis; but this opinion is contradicted by that of Dr. Conolly who in those cases examined by him stated that

that he invariably found that there was remarkable firmness of that structure.

I now come to an opinion which, though that of one less known in connection with medical literature than most of those I have already quoted, still, I consider well worthy of attention I refer to that of Dr. Buchanan whom I had before occasion to mention when considering the nature of those pulmonary cases so common among insane paralytics. He considers that the pathological cause of General Paralysis ~~of the~~ ~~insane~~ ~~nervous system~~ is an atrophy of the entire nervous system. The circumstances on which he founds this opinion are the following; 1. That his observations by measuring the capacity of the Cranium and comparing the result with the weight of the brain showed the constant existance of positive and appreciable atrophy. 2. That in the latter stage of General Paralysis the excito-motor power becomes enfeebled and gradually lost, and reflex movements cannot be induced even by electro-galvanic stimulus; thus

differing

differing from that form of paralysis produced by lesion of the spinal cord, and seeming to indicate that the afferent and efferent nerves or at least their points of reflexion were affected. 3. That in general Paralysis he had discovered that the size and weight of the spinal cord was considerably diminished. 4. That all the symptoms of the disease indicate a gradual and natural decay of ~~the~~ nervous power.

Now provided the investigations of Dr. Bucknill be correct & conclusive we have an explanation which amply accounts for all the phenomena of the disease. In this case the effusion into the ventricles and upon the surface of the brain will not as supposed by M. M. Seguinol & Boyle be the cause of compression, but the result of atrophy; the effusion being necessary to fill up the vacuum caused by the diminution of the natural contents of the Cranium.

Dr. Percy of the Warwickshire Asylum has noticed in several cases of General Paralysis that fluid existed simultaneously within and outside the brain, (extra-

ventricular

ventricular and sub-arachnoid), along with a more or less atrophic condition of the whole organ. And Dr. Rhea in the paper I before referred to gives the average weight of the encephalon of patients who had died of General Paralysis as 46 oz 6 12/15 drs, the sex of those patients he does not mention, but from the rarity of the disease in the other sex we may suppose that they were chiefly males. Now the most accurate enquiries of Dr. Wm Reid and others show the average weight of the male encephalon in health to be about 49 ½ oz. This would leave a diminution in weight in the cases of General Paralysis of about 2 ½ oz which might be the result of the atrophy of the brain. But I am not aware of the cases investigated by Dr. Rhea were sufficiently numerous to entitle us to draw any general conclusion from them. I do not know that the results of Dr. Bucknill's investigations have been otherwise confirmed, and we must bear in mind that the conclusions of the in-vestigator are too apt to be modified by the previous bias of his mind, that "it is easier

If the above be only an atrophy of brain, & the effusion a necessary consequence, - why did Gabriel have found no effusion in well marked cases?

cases to proceed from ignorance to truth
than from error". Nor do I think that
lesions described by several distinguished
authorities mentioned in those papers can
have arisen otherwise than as the result
of inflammation of the brain or its mem-
branes. May not such inflammation be
the result of the rapid effusion on so
delicate an organ, a secondary result
from the Atrophy of that organ? Perhaps
in future years the rapid strides which
are now making towards a more correct
knowledge of the Physiological actions
of the nervous system may throw en-
creased light on the pathology of this as
of many other morbid states now equally
obscure, and the opinion of those who
look on the disease as the result of in-
flammation may be reconciled with that of
Dr. Bucknill who looks upon it as an Atro-
phy of the organ. In the mean time I am
inclined ~~with the~~ with the latter authority to
look on the disease as a Paralysis of the
whole ~~nervous~~ cerebro-spinal system, and
it will be perfectly safe under that idea

to

constitute a rational treatment which I will now proceed to consider shortly.

From what I have already said it will be seen that I do not believe in the possibility of a cure being accomplished in any case wherein Spinal Paralysis has become established; nor do I think that any temporary alleviation of the malady can be gained by the use of Strichnia, Tincture of Cantharides, Galvanism and other remedies employed for the more limitted forms of Paralysis - By those Physicians as Dr. Dr. Bayle and Calmeil who consider that the disease is of an acute nature from its commencement depending on inflammatory actions Antiphlogistics have been employed. Bloodletting general & local, Mercury &c; but I do not believe that, at the beginning of the disease at least, inflammation exists, and in the advanced stages the general condition of the patient must strongly contraindicate their employment. I believe that at any period they could only hasten to a fatal termination a disease which at its longest must be of

brief

brief duration. Along with these I would include all the severe forms of counter irritation, as the actual cautery, setons, moxa. I said that I felt inclined to adopt the opinion of Dr. Bucknill as to the disease being essentially a rapidly advancing phthisis of the entire cerebro-spinal system; it may be looked upon as a process of dying, a slow and lingering but steady progress to the grave. We cannot stop this advance, but we can delay it. Nine are few chronic diseases in which the good effects of a proper mode of treatment are more apparent. What then are the indications to be followed in this treatment. They may be reduced to four

I. ~~Support~~ Support the strength.

II. Provide for the comfort of the patient by hygienic means.

III. Ward off the complications which are known to be likely to arise.

IV. If these complications have arisen strive to effect their cure.

I To support the strength. This may be done by means of nourishing diet and stimulants

stimulants in moderation. The patient must not only have the ordinary daily diet of the invalid, strong beef tea, eggs, porter, ale &c and I believe he cannot have more appropriate stimulants than the two latter articles, used in moderation. I believe that Calumba Cascarilla the Phosphates and other tonics may be useful in many cases. I am not aware if these elements of food especially adapted for the nourishment of the nervous system have been much tried, but theory at least would seem to indicate their employment.

II. Provide for the comfort of the patient by various hygienic means, these are, 1. Cleanliness. This especially in the advanced stages of the disease when the sphincters cease to perform their function is not easy of accomplishment, but it is most important especially when the patient is confined to one posture. Faeces and urine must not be permitted to remain about the person. I would recommend ablution with tepid

water

water at least twice a day if practicable, and frequent change of clothing, also layers of oil cloth and other contrivances to prevent his excretions rotting the bed and bed clothes.

2. Warmth. This the patient is unable from the defect of nervous energy to generate in sufficient amount in his own body, it must therefore be maintained from without by means of woolen clothing and an atmosphere of steady temperature. This is especially necessary in the severe weather of winter.

3. Exercise This should be moderate, not likely to excite the patient and in the open air in mild and dry weather.

4. All sources of excitement and whatever is likely to annoy the patient, if unnecessary for his ultimate good, must be avoided.

III. To avoid complications likely to arise, among others I may notice,

1. Bedsores These may be avoided by frequent change of posture, water beds and other mechanical contrivances, cleanliness and dryness, or perhaps a position may be necessary to harden the integument if change of position is impracticable.

2. Costiveness of the bowels, This is a very frequent accompaniment of Genital Paralysis and must be warded off by the use of Cathartics, sufficiently powerful to produce the desired effect, yet mild to avoid a drain on the system.
3. Diarrhea, is less common than the opposite condition and if a tendency to it exists it must if possible be prevented by attention to diet &c.
4. If convulsive attacks of any sort are to be apprehended all exciting causes of such attacks must be avoided as much as possible; and the constant presence of an attendant is necessary to prevent injury to the patient from mechanical causes if such attacks should supervene.
5. A tendency to lowness of spirits on the one hand or to excessive excitement on the other must be guarded against by the proper treatment moral and physical.

IV. If any of those complications have arisen they must be treated according to the general principles of treatment for such ailments, the state of the patient mental and bodily being however always kept in view. In obstinate constipation a purge may be occasionally

occasionally useful, and hourly treatment may be necessary to check an obstinate de-
-lirium. I have also found effect follow the administration of a draught of Camphor mixture and Hyoscyamus. Here excitement and wakefulness ceased. I think I have seen benefit derived from the application of a blister to the nucha. Two convulsive attacks occurred.

I have only now to add that in the treatment of this most unfortunate class of patients we must not be induced to relax in our endeavours to afford them relief because a radical cure is impossible. We may consider them dying men, but we must not by withholding aid give them the "Coup de grace". It is in our power to alle-
-viate their sad condition and prolong their life, and however undesirable the prolonga-
-tion of such a life may appear while it is not more miserable than many in which the faculties of the mind remain entire: Nay, in comparison with the excruciating mental anguish of many a bad man, a state of Dental Paralysis and Chronic dementia would be blest. We would rather the former

but

both cannot do this; we can relieve the latter and wherefore should we not do this? A time may yet come when a means will be known not only of alleviation but of cure.

Table I (Over the page.)

Containing Statistics of 28 Cases of General Paralysis dying in the Essex County Lunatic Asylum from 2nd Feb. 1854 to 29th May 1856, referred to in the preceding pages.

No	Sex	Age	Name	Profession
1.	F.	44	Mariah Paul	Widow of Publican
2.	M.	44	James Ridley	Labourer
3.	F.	58	A. Wood	Wife of Labourer
4.	M.	43	J. Hayslip	Gardener
5.	F.	58	Susan De Ville	Widow of Bricklayer
6.	M.	61	Thomas Farrow	Jobber
7.	M.	34	Thomas Whitney	Labourer
8.	M.	41	R. Whitsed	Labourer
9.	F.	48	M. A. Harris	Wife of Gardener
10.	M.	37	Thomas Copland	School Master
11.	M.	46	L. Wilson	Sergeant
12.	M.	41	J. Chandler	Labourer
13.	M.	40	J. Cross	Baker
14.	M.	54	Wm. Cobbett	Potter
15.	M.	31	J. Tolt	Labourer
16.	M.	59	J. Basham	Gardener
17.	M.	56	J. Pomphett	Lawyer
18.	M.	50	Geo. Breeze	Coachman
19.	M.	79	J. H. Farmer	Farmer
20.	M.	34	J. Lincoln	Shoemaker
21.	F.	48	Sarah Rowe	Wife of Joiner
22.	M.		Isaac Moore	Criminal Lunatic
23.	F.	45	E. Pankhurst	Widow of Basket Maker
24.	M.	49	J. Crane	Labourer
25.	M.	40	Robert Wildman	Unknown
26.	M.	45	J. Brangwyn	Unknown
27.	M.	47	Edw. Fincham	Labourer
28.	F.	65	J. Franklin	Lodge Keeper

Date of admission	Date of death	Time between adm. and death	Supposed Cause of Insanity if assigned	Time Insane before adm.
10 Oct 53	2 July 54	1 Year 8 Mos		
29 Oct 53	7 " "	1 " 3 "		
25 Oct 53	14 " "	1 " 0 "		
8 Oct 53	24 March "	2 " 6 "		
17 Nov 53	2 April "	1 " 3 "		
13 Oct 53	3 " "	2 " 4 "	~~Hereditary~~	1 Year
29 March 54	22 " "	3 " 3 "	Intemperance	9 Months
28 Sept 53	8 May "	3 " 5 "		
11 Oct 53	1 June "	3 " 2 "		2 Years
28 Jan 54	13 July "	2 " 5 "		7 days
22 May 54	14 " "	7 " 4 "		
10 Oct 53	7 Aug. "	4 " 0 "		10 Years
14 Dec 53	14 " "	3 " 5 "		Some Months
30 June 54	27 " "	8 " 2 "	Apoplexy	
27 Jul 54	24 Sept "	2 " 6 "		
29 July 54	6 Dec "	1 " 2 "		2 Months
14 Feb 54	7 Jan. 55	2 " 2 "		2 Months
21 Aug. 54	28 " "	2 " 1 "	Intemperance	
18 Dec. 54	31 " "	6 " 4 "		11 Years
8 Jan. 55	6 March "	8 " 1 "	Intemperance	4 Months
16 Aug. 54	15 July "	4 " 4 "		18 Months
10 March 54	20 July "	1 " 0 "		
5 July 55	14 Nov. "	1 " 6 "	Grief	
4 July 54	23 Dec. "	1 Yr. 24 " 5 "		
12 Feb. 55	10 Feb. 56	5 " 6 "		
4 Aug. 55	8 March "	3 " 6 "		
27 Sept. 53	3 Sept. "	2 Yrs 48 " 5 "		
19 Jan 56	29 May "	1 " 5 "		1 Year

Table II

Duration of Cases of General Paralysis occurring in the Derbyshire County Lunatic Asylum which proved fatal during the year 1855, counting from the date of admission & the time of death.

No.	1		43	weeks	1 day
"	2		11	"	0 "
"	3		10	"	2 "
"	4		25	"	5 "
"	5		18	"	2 "
"	6		1	"	10 "
"	7		38	"	2 "
"	8	1 Years	7	"	3 "
"	9		51	"	3 "
"	10	1 Years	22	"	3 "
"	11		29	"	1 "
"	12		4	"	5 "
"	13		4	"	5 "

Table III

(1.) From the Obituary of the Essex Asylum 1855.

	Males	Females	Total
Deaths from General Paralysis	12	4	16
Do. " Cholera & Choleraic Diarrhœa	16	1	17
Do. " All Other Causes	30	15	45
Number of Patients under treatment	204	235	439

(2.) From the Obituary of the Essex Asylum 1856

	Males	Females	Total
Deaths from General Paralysis	6	2	8
Do. " All Other Causes	14	26	40
Number of Patients under treatment	185	251	436

(3.) From the Obituary of the Derbyshire Asylum 1855.

	Males	Females	Total
Deaths from General Paralysis	13	0	13
Do. " All Other Causes	9	6	15
Number of Patients under treatment	135	142	277

(1) 20 per Cent of the Deaths from General Paralysis
(2) 16·6 per Cent " " " " Do. Do
(3) 46 per Cent " " " " Do. Do.