The Therapeutical Value of Physiological Rest in the Treatment of Disease

"Life is short and the art long; the occasions fleeting, experience fallacious. Judgment difficult."
Hippocrates. Aphorist.

Thomas L. Kennedy M.B., C.M.

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The Therapeutical Value of Physiological Rest in the Treatment of Disease:

The subject of the present essay has been forcibly presented to my mind by a number of circumstances during the short course of my professional life and may be grouped as follows:

1. The experiences of a Loco-Motor Nasus

2. The study of the late Mr. Helton's "Rest and Pain"

3. The perusal of a number of classical works on medical subjects, beginning with Hippocrates, "the Father of Medicine".

4. Experiences gathered during the past five years, in cases in which treatment by drugs was either impossible or in some way incapable of being carried out, yet misunderstanding that the result was satisfactory.

5. A study of the Evolution of Treatment in Disease - the differences in practice at various periods.
Now I wish it to be clearly understood that I do not in any way wish to deny the use of drugs in the treatment of disease. Far from it. The intelligent and scientific administration of remedies has my most cordial approval — and practical approval — proximitus and am daily engaged in promoting such as my education and experience have convinced me of their service-ableness, whether they be empirical or rational. What I wish to truly point out is viz. that part at least of the improvement we observe in the return to health is due, in many cases, largely to in some cases that come under our notice to physical exercise and rest.

I. The Experiences of a Toehill Village

The experience gathered in this department of medical practice, during the course of some fifteen winter's, was a rude shock to my preconceived notions of therapeutics. One case in particular impressed on my mind in which an aged practitioner prescribed Colonel Rupin in the treatment of a case of Spasmodic Croup! The "To-medically Natural"
could not survive this - the patient succumbed to his malady.

Another case occurs to me, where the

prescriber in case of "threatened

Abortion," administered a combination

of Muriate of Antimon and Liquid Insti-

reet Nervat, in the proportion of

seven minims of the former to

one dram of the latter. Whether

each drug was meant to antagonize

the other, render the effect nil,
or the saline effect of the Opium,

was to moderate the oxytocic

effect of the Nervat, or whether

the prescriber had any sort of

notion what effect he intended to

produce I was unable to discover.

A very excellent surgeon to a well-known
hospital in London, who had a

mixed practice, candidly confided

knowledge to me that "he knew

nothing about medicine." He

seemed to have unlimited faith

in force of Potassium which he

rarely ever failed to order as one

of the ingredients of his mixture.

Curiously enough the mortality

of his medical cases did not

seem to exceed that of any other practitioner

with whom I am acquainted.

This gentleman did, at any rate,
know that there was such a thing as
incompatibility in he was careful to
obtain him present in a vessel of
Potassium with Sweet Spirits of Vier.
This full of preserving incompatibility
is a far from pinnacism see with
many medical men though we
cannot all hope to have the greatest
knowledge of an accomplished chemist
yet we ought to be able to recognize
the greater laws of chemical reaction
in decomposition. Those known
Acids volatile or present together
also combination of sulphate of
thrace and dilute Vier Acid.

The custom of prescribing a great
number of substances having the
same therapeutical action or on
the "mother of principle" that
some of the ingredients may, at
any rate produce the desired
effect, has not altogether died out
even in this age; and although they
may not have the omnipresence of the
Antidote of Methadthas in the works
of Ambrose, yet their potential
energy when converted into the
chimie form cannot fail to produce
anarchy in the organism.
To the late Mr. Hilton, "Rest Plain."

This formula, as written by the "Apostle of Rest" in the domain of Surgery, led me to consider whether those principles were not applicable to the medical side of the question, as distinct from the surgical side.

I am aware that Mr. Hilton has, in some measure, drawn attention to its applicability to diseases other than Surgical. It may appear to many that the term "Rest" has been somewhat strained to meet his theories, and I am by no means disposed to deny it. The reviewer of his book in the "British & Foreign Medical & Chirurgical Review", has well stated his case as follows:—

"The term Rest, as employed by him, has a wide significance. It does not mean only mechanical, but physiological Rest, not only absence of movement, but cessation of function. In the majority of cases the treatment by Rest involves letting the patient alone as much as possible, the avoidance of counter-irritants, and such remedies, and one of the most valuable features of the book is the protest it enters against "meddlesome Surgery." May there not be such..."
a thing as needless as treacure. I am disposed to think so.

The present of classical works on treacure is

No one will, who has read any of our famous ancient authors, will not have been struck by the amount of knowledge, perspicuity of observation, completeness of detail, in which they described the signs and symptoms of disease. And it is only more astonishing that some of their practices have been continued down to the present day with little modification (1). It is equally astounding that such a practice as bleeding (2) should have been continued well into the present century (3). Such was the treatment of hemiplegia—Hippocrates—Vol. I. p. 88.


(2) He cited Galen, Sir Thomas Wallis.

(3) It was common practice in this part of the country for the peasants to be "blowed" every spring & autumn. I was also informed by one old practitioners near Nottingham, that in his young days, it was using common practice. What he as an apprentice was largely engaged in this practice.
the tenacity with which this principle (bleeding) had obtained in the minds of medical men that it was only about a month & a half after the publication of Dr. Cushing's paper that the practice of this method of treatment was completely abolished in our own generation.  It may be clearly seen by glancing through the current literature that Books of the day.

May we not reasonably conclude that a great number of the cases subjected to this treatment got well in spite of it.  How many succumbed to the disease plus the treatment. ?

IV. Cases in which treatment by drugs was at a minimum:

The question must have arisen in the minds of most men after the termination of an illness in which a variety of drugs had been used.  Is the return to health due to the administration of drugs?  It seems to me that no candid minded man can answer this question satisfactorily.

(At) early last year I saw an old lady who had been extremely lecherous & scalded in the left infra-scapular region for a neuremata she has in her feet.  Last week I saw another woman (of whose birth was literally covered with the scars of exebutions)
in all cases, at any rate, in the affirmative.

Most in the early part of this year I a very interesting case of Influenza followed by Acute Capillary Bronchitis. Which I will give in some detail as it well illustrates my point.

A.D.J. a Lady aged 63 years, had an attack of Influenza beginning on January 23rd 1893. She was given a medicine of Salicylate of Soda and Carbonate of Arsenious of which she only had a few doses. She had an objection to taking medicine of any kind and being of an unstable nature it was found impossible by her attendant to carry out the medicinal treatment. She kept her bed for five days it was confined to a fluid diet. The temperature was never higher than 100° F. but only on the last two days. A few scattered hemorrhages broke but nothing was observed on a physical examination of the lungs. On the 29th January she sat up in an armchair in her bedroom. While her attendant had gone out of the room, she went to the window of her dressing room & spoke this to her gardener. It was a very cold January day with a North East wind. The following evening
her temperature was 104°, pulse 100, respiration 40 per minute. On examination of the chest there was no dulness to be observed anywhere. Sore metalic expectoration was to be heard all over the back of the chest. Some rales sounds Phlegme scattered over the limit of the chest. Two days later, 2nd February, she was slightly delirious not steadily. Horse to the 3rd. When her pulse was 110, her respiration 30 per minute, the urine contained a cloud of albumen. She was in a condition of ruffling albumen with increasing Cyanosis. Ice with Valentine's mixture, water and Champagne were given in dessert food. But soon every quarter of an hour she swallowed fairly well. Her condition now being extremely grave. Few little hopes of her recovery. But remembering having seen a somewhat similar case described in 'Trends.' went to Town for a bottle of Brain's Pure Oxygen. During the night of the 5th Feb' her condition was almost goal of 'Articulo Mortis.' The Cyanosis greatly increased. The face, part particularly around the mouth was of a dark purple color. The tongue tinge those of the same dark color. The raw

(\textit{Lancet} Feb 27th 1892 - The envenomous arsenic ingestion of Oxygen in a severe case of Bubon -

\textit{syphilis following influenza.} Bevan, Collin Snow's...
became flushed. The face sunken. She had
falsed. Respiration 50 per minute; firm
mucus rolls in the throat, passing
 tenerously into the bed.
In the early morning being now quite
mierous, she was unable to swallow
athing. Nothing suppositories were
administered every two hours, her
rections. In this condition she remi-
ained till the next morning (6th) when
the oxygen arrived and immediately
egan its administration, turning on
small steady stream which was
coupled to the patient's mouth
by means of an indiarubber tube with
ner funnel at its extremity. This
was placed on her chest close to the
mouth. The pulse up to this time had
been very irregular, small, intermittent;
at times so small that it was almost
perceptible. During the administra-
tion of the oxygen carefully watched
the pulse perspiration. In the course
of a quarter of an hour, the pulse
came slower, fuller, and more
regular. The respiration dropped to
40. The deep purple color of the
cheeks, lips, and face became of a peculiar
pasty tint. The administration
was shortly continued for three hours
when the bottle gave out. The pulse
was then 80. The respiration 32 per
minute temperature 101°. During the next few hours the pulse sensations increased in number, the former to 100 the latter to 150. A fresh supply of oxygen having been obtained, it was administered continuously for 24 hours, when marked improvement followed on the same lines, though she was still delirious. On the 9th Feb the temperature went down to normal in the morning but went up again in the evening to 100° and remained so for another day or two. The improvement was maintained on the 13th. She had a little solid food on the 15th. An attempt was made to give her Chinese Ammonia Benzoate but owing to the intense re-dermatism the difficulty in giving nourishment— all attempts were abandoned in favour of food. She made a slow but good recovery. I attribute the recovery in this case 1st to the strength of the patient (when at her worst she was able to lie on her side slightly) and the regular frequent administration of food 3rd— the timely aid of the oxygen which undoubtedly tided the patient over a critical period.

V. A Study of the Evolution of treatment in disease— the differences in practice at various periods.
Dr. Adams, the translator of the "Genuine Works of Hippocrates," in the Argument prefixed to the Treatise on "Regimen in Acute Disease" (1) Vol. I, p. 280 after referring to the plan of Hippocrates of treating Pleurisy, by hot fomentations followed by purging & piercing, speaks of Galen condemned the use of Narceae in this affection says — "Now this is a most important consideration as bearing on an mode of practice which has obtained much favour of late years. I allude of course to the treatment by a combination of Mercurials & Opium. The experience of some thirty years would seem to decide in its favour, but how often have certain methods of treatment in other cases obtained the sanction of professional favour for a much longer period, and yet in the end been abandoned as positively prejudicial. In my younger days I knew old practitioners of the highest reputation who administered these medicines in Scrofula — in Cancer — in every case! Dr. Graves, (2) in comment, very strongly in the practice of his time of purging bleeding — you have probably observed that, in the treatment of all

(1) The Sydenham Society's Works. (2) Graves Clinical Medicine
Cases of fever that came before me, I
have not prescribed altogether a
dozen grains of Pelonnel, that I have
very seldom ordered any kind of
purgative medicine, but those
been sparing in the use of ecology,
that I have not ordered a single
patient to be bled. This I am
aware will appear strange to the
various sects ofpathologists, the
whom I have seen, like so many
cases succeeding each other, and
whose doctrines were equally doomed
to breach on the solid immovable shore
of truth. I recollect how each doctrine
arose and made converts; influence
practice, how each had its day then
sunk into that obscurity neglect to
which vain or profitless speculations
are always doomed. I recollect
when it was the custom to commence
the treatment of fevers by presenting
ten grains of Pelonnel to be followed
by a tinct containing fifteen grains
of Ipecac or by a large draught composed
of infusion of bran, gum sarsaparilla
or lectuary or Teacher's Quinine. I remember
the time when it was the fashion to
bleed every case of fever which came
into hospital, no matter what the
stage of the disease might be or what
the condition of the patient was, at the
It seems to have been the case throughout the history of medicine, that in the treatment of some specific diseases methods of procedure have been introduced by some master mind - and that these methods have held the field, without their propriety being questioned - even in view of the fact that remedies giving equally good or better results had been introduced.

The history of the treatment of acute Rheumatism well illustrates this point.

Sydenham, the father of English medicine, seems to have given in repeated bleedings in this disease, to the extent of ten ounces of blood each time, or twice or three times, or often, if necessary. This was accompanied by a light diet, nothing but whey, for the first four days, and the exhibition of purgatives, every other day - truly a lowering system of treatment!

Now it may readily be understood how this system of purgation has gained such a hold in the professional mind, and that of a higher order, when it was advocated by no less authorities than Dr. Latham in the earlier part of the 17th century. In Sydenham Vol. II p. 245, Sydenham Soc. translates, "The purgatives..."
century later by Sir Thomas Watson (ed.). Though here we can discern the tendacy of the times, as the two latter authors do not insist on it as a sine qua non, and indeed the latter of these states that it is rarely his practice to prescribe phlebotomy:

"Yet looking to my own practice in acute Rheumatism I find that although I am in the almost daily habit of treating it — for it is a disorder from which our hands are never perhaps entirely free — rarely prescribe phlebotomy." Notwithstanding this however he gives detailed instructions as to the benefit likely to be derived from it.

The Celebrated Dr. Graove was also in favour of Vinculation for this condition. He says (4) that practitioners are apt to make a mistake in the treatment of this disease. They find the pulse quick, hot, very sedate, strong and rather forbidding then indicating the abstraction of blood. How then are you to treat such cases? By the lancet. Begin however cautiously, take away as first about five or six ounces of blood and observe what effect it produces.
If your patient's pulse is improved by
pain lessened and the sweating diminishes
you are encouraged than to bleed more
boldly. A Visceral is here our first anchor.
Colonel O'Sullivan were employed by all
of those authors they all speak highly
of this form of treatment with which
Dr. Chambers fi credited as the introducer
into practice. Colchicum Aquileum
share the honours with the former.

Trouseau: Saus to brush down the
expectant blood of treatment:
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Clinical experience has taught me that
the worst blood is not to employ a
form of treatment determined upon
before hand. Therefore we
ought to do no more than try to
imitate nature, that is to say, try
to maintain the rheumatic sweats,
Ease the articular pains, and above
all, avoid promoting visceral metestasis
by avoiding improper treatment.

He then goes on to point out that the
Benzolbacyte of blood treatment, then being
introduced in this country, might have
the effect of increasing the amensia
of rheumatic subjects. Again
he says that there is nothing calculated
to carry emotion to the minds of
practitioners in the writings which

advocate the treatment of Rheumaticism by large doses of Sulphate ofquinine "mitrate of Nataral Antimonials."

As Sir Thomas Watson sentimentally remarks, "Now you may be sure when men differ concerning the treatment of a disease which is of common occurrence and easy recognition, are thus unsettled and diverse - you may be sure, first that no specific for that disease has yet been discovered, and secondly that the disease is not very obstinate or not steadily obedient to any remedial plan."

Nothing perhaps could be more truly said than this of the treatment of acute Rheumatism. In time to come down to later times. We find the "alkaline plan of Garrod," followed by the "team plan" treatment of Rees; the "six weeks' plan of Warren"; the "expectant treatment of Larcher and Sir H. Clapp"; these authorities giving between fifteen and nineteen days as the average time, till freedom from pyrexia and arthritic pains was experienced - a result that will compare favorably, "Caelestis paribus", with our modern

2. do - do - - p. 743
treatment by Salamis, Delphi, &c. &c.

I only propose giving one or two instances of the manner in which practices of remote periods of our therapeutical history have been continued down to the present day, mere error unchanged—refer to the practice of Counter-irritation. Although I have not been able to discover that Hippocrates makes any mention of counter-irritants, such as sinapisms (which are mentioned by later authors) and blisters, yet we suppose that part at least of the virtue of hot fomentations and applications are due to this cause; he gives a very succinct explanation of the early treatment of Pleurisy by this method: hot water in earthen or frozen vessels or bladders, a large soft sponge soaked in hot water, barley boiled in diluted vinegar, hot braun or salt in millet in wooden bags for the relief of pain. Astley recommended the actual cautery to be applied to different parts of the chest in pleurisy. Celsus directs sinapisms to be applied to the chest in pleurisy and also do

"Hippocrates, Vol. I. 1289. Sect. 1
2. Paulus Aureolus, 1. 494.
3. Ibid. P. 499."
Avicenna and Holy Air. 6

It is accurate that Sydenham does not make mention of counter inflammation in the treatment of Pleurisy, and it seems as though he was averse to that method. In an early edition of his works there occurs the following paragraph:

"In regard to blisters, which are so much in use, I neither see my way as to how they draw off the febrifuge fluids from the muscular parts, wherein they dote, nor how they can in any way free the blood from the phlegm matter that disturbs it, nor return which they irritate the patient by the sore which they produce upon the skin, and so to the lowering effects of the disease. Although those often used them, and have found that many patients have done well, I cannot refer any good to their action. I believe that they have as much to do with the recovery of those to whom they are applied, as the puerperal itself. Luck has enabled many a worthless medicine."

"Paulus Aegineta Vol I. P. 500
962 P. 501"

"Sydenham Vol II. P. 245.
Ae late Opera omnia (Greenhill) P. 53 & Tremelius by Nathanson Vol I. P. 58."
There can be little doubt that the application of Counter-irritants is in our day somewhat in disfavour, at any rate in comparison with say some thirty years ago. Graves appeared to use blisters, rather extensively on different objects, as a stimulant in fever when the patient was in a semi-comatose condition as a test to carry the vital powers of the body. But their application in pneumonia or pleurisy is on the decrease will not. What be denied and that great difference of opinion exists as to their utility will not be disputed.

"Who shall decide, when doctors disagree?"

"And soundst basinst doubt, like you now?"


Therapeutical Fallacies.

In the history of medicine in all ages we are embroiled with remarkable so-called cures of disease, either by supernatural means, or even of an entirely non-scientific character, capable of us proof to the trained mind utterly futile conclusions. The extraordinary way, even in our day, in which men of intelligence and

Graves - Clinical Medicine Vol I 1st Ed. 11
and culture, in this the close of the
nineteenth Century, testify to the virtues
of means, worthy only of the name of
barbarism, pure, comprehensive.
There seems to be deeply rooted in the
human mind a capacity in receiving
impressions bordering on the marvell-
ous. May it not be that this is the
residuum of barbaric ages
of a time when the superstitions and
the miscellaneous constituted so great
a part of the spiritual life of humanity?
Does it not show how great a hold
in the organism, impressions that
are implanted by the teachers of the
youthful mind have upon the
individual throughout his lifetime?
Who does not remember things taught
in childhood which in spite of education
intellectual growth drop up at unfort-
unate times as if to assert themselves
in the more matured part of our life-
time?
I have been much struck by the fact
that particularly in isolated Country
villages where the means of communica-
with outside communities is small;
wise ways and means concerning var-
ious ailments and their treatment may
in substance be is in the aphorisms
of Hippocrates spoken ancient wits.

2. Ibid. "Vol II. P. 1743. Aphorism 32.
just as proverbsof our day, and in thos.
of earlier times have their prototype
in the works of Horace & other classical
authors.
The virtues of so called magnetism seem
to have been denounced by Paracelsus,
and he practised on the credulity of his
patients by means of a crystal called
“Azoth” and by which he cured palp
- eury, hysteria, spasmodic affections. He
was more modest than the Galvanic
Tenders of our day who do not “draw
the line” at fraudulent revenue deals.
What the human mind has been impelled
by the marvellous at all periods, is well
illustrated by the “maligning to the King’s
Evil” initiated by Edward the Emperor
(1058) and practised till the latter
of Queen Anne (1712) in which year
Dr. Johnson when in his thirty year,
went to London by the advice of
Dr. John Floyer — a Lichfield physitian
— to be touched by the Queen. The
“weapon salute” of Dr. Floyer 1603, the animal
magnetism of Mesmer 1766, the “faith-
healing” of Prince Alexander Hohenlohe,
Schilling’s first, Roman Catholic Bishop
of Sandesia 1794; and the last able Tractors of the American, Benjamin

1. The Healing Art. 2. Ibid. 3. Ibid 206. 4. Ibid. 227 5. Ibid. 238
6. Ibid. 242.
Douglas Perkins 1798, have most of their
counterparts in our day, in the
way of Bethsheans, pilgrimages to
Knock & Lourdes, galvanic appliances,
the thousand cure pills & the practice
of Homoeopaths.
So Layard in his Medical Observations
of Research "P.25" gives a scathing denunciation
of Homoeopathy refutes the fallacy on which
the system is based.
Trousson in Vol.7, p.131 says, "Homoeopathy
may unintentionally and unintentionally, I admit,
"come opportunely to teach us to recog-
"nise the inherent forces of the living
"sermony. Their successes have with
"precision upon cases which they
"attribute to themselves, but which
"belong exclusively to nature, have
"been useful lessons to us. They have
"taught us to rely a little less on
"ourselves and a little more on the
"wonderful "aptitude of the tissues"
"apparatus which constitute the
"animal machine"
The Influence of Rest in Disease

And now after this perhaps somewhat long preliminary survey of the influence of the mind on diseases of the body, which we might by stowing a little the term, call "Rest of Mind"; we come to consider the main times of our enquiry viz.: the part that Rest plays in the restoration of the balance between disease and health between the pathological and the physiological.

That Rest plays an important part in the animal economy is a self-evident proposition that is one of no dispute. That it is equally important in the vegetable world no one I think will be disposed to deny. We have evidence also that it is an important feature in the working life of a machine if it is to be kept up to an efficient standard.

In an early period of the World's history when the mental faculties of mankind were undeveloped by the struggle for existence a limited to the status of the higher mammals of our days; before the period when the energies of mind were directed in
search of a Materna Thesia - Rest was
the sole remedial method of primitive
man as it is now in animals of a
lower Scale than the Anthropoids.
Who has not noticed the way in which
a wounded animal or bird retires to
the darkest corner of its environment
in order to place itself under the
only means in its power - Rest? - Is it not
the need of rest for the
weary mind the worn out muscles
glandular organs of the body that
instincts Sweet restoring sleep has
been provided in order that the
molecular forces of the organism
may be reinvigorated and stored for
another period of activity.
In the Vegetable Kingdom, we can
see that periods of rest are as
essential to the growth Develop-
ment of plants as that of the
individual. The Closing of the
petals of flowers at night, the Closing
of the leaves from their daily work of
absorbing Carbonic Acid and taking
in Oxygen & moisture, even when grown
in tropical Climates or under artificial
conditions: the descent of the sap in
winter so that the plant may have a
period of rest to recuperate its
exhausted energies, in order that it
may burst forth anew in the Spring.
to again perform its cycle of changes in furtherance of its destiny, the "propagation of its species."

It has been said that "the child which sleeps most nurses most," and I think this might be said to be generally true of all young animals at the time when growth is most rapid; and in it not to a large extent owing to the rapidity of cellgrowth that there is need of rest, in order that the molecular forces of the cell may be potentially energized for the next period of active work.

The Physiology of Rest

I now propose to give, so far as any limited opportunities of consulting the literature of the subject have permitted, the results of an inquiry into the effects produced by rest in the organism, and here I should like to make clear that I do not intend that it is possible to obtain Complete Rest in any sense of the term. Such a condition would be absurd in the face of the fact that suspension from action of the cellular, glandular, muscular, & nervous elements of the
of the body means total molecular death; though this is true of complete physiological rest it cannot be of partial rest not to in this sense I wish to bring the question into prominence.

It will doubtless be conceded that it is possible to have more than complete rest of the Voluntary muscles when the body is in the recumbent position and during sleep such involuntary muscles as those of the tongue, the eye, the ear and others will be in a state of rest; providing there be no abnormal brain action of their respective centres. This cannot be claimed for the involuntarily muscles of the Heart and Blood Vessels: still even here it cannot be affirmed that these muscles do not rest. They do not rest: it is true in the same manner as those of the tongue or the eye, but they may be said to rest nevertheless. If we consider the duration of the events in the Carotid Cycle— the Atrioventricular systole lasts 1/6 of that period and the Ventricular systole 3/9 (2/3); then the Atrioventricular systole occupies 4/9 of the Carotid cycle and the pause or resting
period, obtained by the heart muscle will be 579; so that we see the total intermittent rest obtained by the heart is something appreciable, even if we allow for the shortening of the pace by such causes as valvular defects or other inherent deficiencies in its mechanism.

In the recumbent posture it is well known that the frequency of the pulse is much diminished. Dr. Grove made a special study of this subject and has gathered some very interesting conclusions from experiments made on individuals in a physiologically healthy condition and those suffering from pathological affections chiefly Febrile and Cardiac.

He summarizes his conclusions as follows:—

1st. That the greatest difference of pulse rate occurs in patients laboring under fever or in a debilitated state in consequence of fever or any other cause.

2nd. That this difference increases after the first quarter or an hour in most cases, but always remains considerable as long as the same position is observed.

Grove—Clinical Medicine Vol. I Sect. IV. The Pulse
320 That in persons not much debilitated the difference is much less than that stated above; often does not amount to one third 60.

14th. That when the patient lies down the pulse rapidly falls to its lowest tension.

5th That in some the increase in frequency is greater between the horizontal and the sitting posture than between the latter and the seat; while in others the entire change takes place in the generally the frequency in the sitting posture may be taken as a mean.

5th In persons enervated from fevers or acute diseases, and if it is absolutely necessary to the physician to ascertain the comparative frequency of the pulse in the horizontal and in the seat position, the greater the difference, the greater the debility of the patient; consequently the more guarded must the medical attendant in allowing him to sit up be in allowing him to sit up for any length of time, particularly if the pulse while lying down does not resume its usual degree of frequency.

It is facilitating to note, as bearing upon these statements of Dr. Groves is an observation of his Clinical Value of Communicatin in the Medical Press Circular, January 16th 1834 by H. Bryan in which he states that he has a
a number of cases of acute disease — Acute Rheumatism, Pleurisy, Pericarditis, and Bright’s disease which rapidly became convalescent and appeared well in every respect, so much so, that he allowed them to leave their beds at an earlier period than he otherwise would have done. In each case, a return of the symptoms or other complications followed. He asks — “How long should we keep our patients in bed”? Dr. Groves, I think, answers that question.

It is a physiological truth, that when the body is in the supine sack posture the heart action is less rapid than in the erect posture. This is explained by the fact that the blood-pressure in the brain is increased and in consequence diminished cardiac action. Assumed blood-pressure is produced through the action of the Endo-inhibiting Centre, which is more active under these circumstances. The result of this will be an increase in the amount of sapubulum comes to the tissues, leading to bumsed physical semblance changes in the cells. The amount of work done by the cells will in this way be diminished and a condition of partial rest established.
It is true that in disease, particularly in acute disease, the elimination of waste products depends upon insure changes, but it appears that the daily excretion of solids in the urine is diminished from 60 to 40 or 50 grammes under these conditions; though they point out that sick people take little solids and consequently a great part of the solids excreted in the urine are derived at the expense of the body. In the same authority it is stated that diminution of the quantity of urine occurs, with very few exceptions in all febrile diseases, in pneumonia, pleurisy, typhus, gout, rheumatic fever.

The Value of Rest in Disease

"In every movement of the body, whenever one begins to endure pain, it will be relieved by rest."


In considering this, the practical aspect of the subject, it will be interesting to note that the "father of English medicine" has enumerated the therapeutical advantages of rest.

"Newbauer and Vogel, p. 363 in the urine.


G. Sydenham, Vol II, p. 86.
of Rest in this instance from a praecox
point of view. In speaking of the treatment
of "Continued Fever" he says .... Several
lines when I have been called in to treat
in indifferent circumstances, whose purses
would ill bear to be drawn upon to a
large charge of physic, those done nothing
after the bleeding remetic (in such cases
as they were required) beyond informing
them to keep their beds close, during
the whole course of the disease and to
drink cedelined gruel, barley broth or
something of that sort .... In this
manner, without any further compulsion
of practice, beyond the mere addition of
"charge towards the exclusion of the
complaint" sent them out of hand
"Safe & Sound."

Towards the end of the chapter, in referring
to N멍 as a complication of the disease
after prescribing aphro simplices (common
parsley must water &c., having previously
administered Enzima) he states:
"To promote a low diet, allowing the
patient only a few spoonfuls of broth
both twice a day. I keep him also
to his bed during the whole illness
until signs of a perfect cure appear,"
Again in speaking of the value of Bank in
in Intermittent Fever, he says:— Perhaps
this may be used advantageously in typhus
(fever of autumn) as it is in autumnal
ague. To speak the truth however, to
speak also to the present purpose. my
appearance tells me they must try that
of the patient who has been seized with either
the one or the other of those cases of fever,
be either child or adult, if it is best
not to meddle at all—unless in the
way of medicines of any sort, nor yet of
that of air or diet, presuming as I never
yet have known them come where Nature
has been wholly left to herself."

Of the danger of too active treatment he
neglect the fact, that with all the means
at our command, we can but assist
Nature to shake off the diseased frame
her to the normal, there can be little doubt.
Thomson pertinently remarks:—
"We have too much faith in ourselves"
"we are too distrustful of that which I
metaphorically call Nature. We do
not sufficiently recognize the fact
that when once the skin is given
"—pardon the vulgarity of the expression—
"things resume their normal style.
"that there is nothing which the physician
ought more to perfect than the return
of the natural functions to activity."

1. Thomson Vol. II. p. 86.
as that will do more to bring about a
cure than all the agents of the hospital.

A. Again, gentlemen, do not forget that, in acute
"cases away rapidly, the patient's
system" soon finds itself opportunity:

While we admit that in chronic diseases
the patient, met the "dead
"necessity of the physician may be
advantageously continued over a long
period, it is nevertheless sometimes
very necessary to stay the hand, though
full of measures much after days.

It often happens that, when Chase
wishing, we see the reformation of the
normal functions from a state of slumber
suppression of fever, or the suppression of the
"burning body" to witness powerful manifes-
tations of a state which is called, without
a sufficient comprehension of the term, "the
"irregularity nature of the

Sir W. B. Foster, in considering this subject
after pointing out Mr. Billan's treatment
of the subject in relation to surgical
practice, goes on to remark: "The
influence of this agent (Physiological
Rest) in the hands of the physician
is, however, necessarily limited by the
very nature of the function of that


Vicera he is called upon to treat. For, in the present state of our knowledge, the cessation of function, in many of the internal organs means death. So intimately is the continuance of their action connected with the maintenance of life. The failing heart, the陨废 lungs: can know no beat in the long circle of their toil; in as their continuance of action means life so their absence means death. Nevertheless, even in diseases connected with the function of circulation or respiration, the influence of rest is not wholly excluded, but on the contrary forms in the present day an element of no small importance in treatment. For although absolute rest can in a short time cannot be afforded to those organs, yet by diminishing the amount of labour, by removing obstacles to normal action we gain for them comparative or, as it may be called: partial rest. In maladies of the Nervous System, in those of some of the secreting glands, no small part of our success would be lost were the weapon taken from our annuory.
Rest in Diseases of the Alimentary System:

In the above lecture on 15.13 Forsk, Cozy's the value of rest in diseases of
the stomach. It leads particularly to
the treatment of gastric ulcer by means
of complete rest in bed, forbidding all
food down by the mouth. Nutrition
inrations along being given in the
first stage of the treatment.

In connection with the treatment of ulcer
of the stomach I ought mention a very
interesting case that occurred in my
practice in October 1881. I was
suddenly called to see a lady, aged
35, who had an attack of
haematemesis. She had it appeared,
felt a pain of an aching character
in the epigastria. Right hypochondriac
region for some twelve months.
The pain was not worse in position
was more of an aching than an
acute character. She frequently
had nausea but had never vomited
until that morning. The vomit was
in a white, hand basin, amounted to
from 1/2 to 2 pints. Consisted of
blood. Various looking clots. A mere fluid
portion with did not appear to be
food (lemon) as she was the morning
occurred one early in the morning.
(7 a.m.) It is not likely to have been such. She herself said she had nothing since the previous evening. She was anemic. The woman 0.9 am inclined to think that there was some secretion in the stomach. The nature of water which was probably secreted might put the influence of emotion. She had a feeble, cyanotic expression.

The pulse was very small and rapid.

As regards the treatment - nutritive solutions were administered per os. Every four hours she was allowed to have small quantities of feed milk by the mouth. This was carried on for upwards of two weeks when Braun's essence was allowed by the mouth in small quantities, two syllabiaries being administered per os and in the 24 hours. The rest was continued in for weeks to rolling green bell milk. Rose (feed) was preferable to Braun's essence. She ultimately got quite well able to attend to her duties. To overcome the sense of nausea which she at first experienced a few doses of Bennet Substitut (9 × 1) were given 1/4 gr. Morphia occasionally to produce sleep.

The application of rest to many effects...
of the alimentary canal. The glandular organs connected with it is of much importance, either by a modified diet or in various forms of dyspepsia. The use of subdued foods to give rest to the peptic follicles of the Stomach and Small Intestine or the Trypsin forming follicles of the Pancreas; the moderation of the diet in Typhoid; the avoidance of all substances likely to disturb the metabolism of the Renal tubules or Solitary islands; the use of Opium to restrain the secretory action of the intestine in general unlocal forms of Peritonitis, or in the relief of Spasms of the gut; all fall within the latter category; as also does abstinence from Alcohol in chronic cases of the Liver. I have in lately conditions.

Rest in Diseases of the Circulatory System.

It is a common fact that such able observers as Dr. Webber, Dr. Latham, and such an able treatise physician as the late Dr. Hellins Fugge do not seem to notice, in their valuable treatises, the influence of rest in vascular diseases of the heart, particularly mitral affections with loss of compensation. More carefully searched than writings...
but have not been able to discover anything bearing on that point.

Dr. Britton, after pointing out the necessity for hygienic measures—diet, clothing, exercise, etc. in valvular disease says, "Nor understanding the greatest care, alike comes, sooner or later, when those who work hard in their livelihood begin to suffer from palpitation, irregularity of pulse, shortness of breath, dropsy, fonndness, albuminuria or..." But even in these cases it is remarkable how often cases the influence of perfect rest and the other items of treatment which have been enumerated, all favourable symptoms subside. Indeed in the treatment of the symptoms remissions of valvular disease there is no doubt that absolute rest is often more value as a remedial agent than anything else that can be named."

In Poore 2. in a lecture on the management of chronic heart disease, describe an interesting case of mitral incompetence, with shortness of breath, cyanosis, dropsy, nearly 10 lbs. in 24 hours) which was treated by rest alone.—"In the treatment of such cases in the summer..."
to bring about diminution in the size of the left ventricle, clearly the indication is not as absolute as possible. The circumstances of the patient must be such that the heart has only the internal wall of the body to grapple with, to this end he must be fed to bed forever to remain there.

I think it is most important that the patient should remain in bed during the whole twenty-four hours, by he allowed to get up, make any effort. Which, mentally quickens the action of the heart, he may undo in ten minutes the good which may have been gained during the previous hours. 

He was admitted with Cardiac Dropsy, a bilateral murmur, scanty albuminous urine on June 1st. I was put to bed, placed on stone diet. In addition to this his known alcoholic keeper will show you that he had done and done only of

He had done no more than only of

He had done no more than only of

He had done no more than only of

One of any cardiac urine in any other drug. On June 22nd the day on which he was discharged, the dulled murmur was no longer audible, the only sign of Dropsy, was a slight pitting oedema over the soles. urea was normal in amounts. Hippuric quantity contained only
very first trace of albumen. Now in cases like this, we commonly follow "a routine prescription, almost automatic, really, one of the common Cardiac tinctures or diuretics, such as Digitafl,
Hepatica, or Rhapte of Caffeine.
If, any other drugs or any other drug
having reputation as medica. has been given, we should perhaps have been quite ready to assent all the improvement which took place to
the drug given "should have said that certainly it was a powerful
valuable remedy. But the only
Cardiac tonic or diuretic which the
patient had was rest - rest which "was afforded by his bad this diet.
In Broadhurst has shown that in these
cases of Persistent frequency of the pulse
due to overstrain of the heart by
excessive exercise, especially in those previously unaccustomed to such e.g.
students, to those of 
ery, who have gone into training
increased muscular effort, "swimming,
running, treading, cycling," I was have a condition of Irritable
Heart" accompanied by "palpitation
faintingness or sensation of faintness,
irregularity in restored action".

that the great remedy in this condition is rest for 1 to 3 weeks in bed in order to allow the heart to "settle down".

He also mentions a series of some cases detailed by Dr. Bristow of Recurrent palpitation in persons otherwise apparently healthy. Points out that rest in bed will be necessary in all cases that though Barorene tone appears to do good, yet it often leaves that improvement lasts longer than any remedies employed.

The late Dr. Hutton says of acute aneurism that the effusion of fluid produces increased friction of the heart consequent upon lesion of the pericardium. Which he thinks must necessarily add to local symptoms. Chiefly he argues that the effusion occurs as a partial or sudden rest to the heart by the absence of tension. Whether this absence of tension was not compensated by the necessarily increased resistance may still exist. Where be much fluid, he doubts.

The treatment of Aneurism resolves itself very much into treatment by rest (apart from surgical procedure) rest of body and the rest of body both

with the administration of oxide of potassium.

Dr. Hildesley Bruce, in an address on this subject at the Royal Medical Society, related three cases of aneurism healed by this method. They were kept for periods varying from two to seven months, receiving daily from 40 to 60 grains KI. With the result that all "did well" or "considerable improvement followed."

Rest in Diseases of the Respiratory System.

In inflammatory affections of the mouth, throat, or tongue, the necessity of quiet is especially pressed. The parts, as far as possible, is isolated in the way of abstinence from talking, movement of the jaws, taking hard solids, etc.

In acute Bacterial conditions — and in bed, the avoidance of infecting substances, such as dust, eggs, etc., is well suggested themselves.

In Pulmonary Affections, local rest by restricting the movement of the part of the chest affected by means of plaster, bandages, etc., advocated by Dr. Burchard. He considers the restriction of the movements of the

c, January 21st 1869
b, Yed Oct 18th 1873
movements of the chest in Phthisis in
emphyseumatic Pneumonia by reducing the
number of respirations, because the chance of
shifting irritating matter diminishes the cough and
expectoration. He does not consider it specific but an ablest
adjunct.
Dr. Wilks' after describing how the
opium is pursued by some that phthisic
really disposed persons are undered
suckle is have deformed chests. It
require development by exercise in
the respiration from oxygenated air
conclusior. Other — whatever may be
the value of these theoretial speculat-
ions if will be is to be a matter of
fact that persons suffering from
Tubectricular disease are benefited by
rest is injured by severe exercise.
Rest combined with nutritious diet
will be to be the best circumstances.
It is not necessary to put the patient
in strict bed, nor to prevent
all movements by strapping and
shelter for ordinary expect is different.
The beneficial effects of rest in a dis-
cased lung may often be observed
in cases where an absence of the
pulmonary tissue penetrates into the
pleural sac, giving rise to collapse.
The lung consequent upon hard is indeed of more importance than climate. The determination of this fact is more pressing, than the discussion of all the theoretical questions of the intimate pathology of disease.

Dr. I. Roberts, advocate, mechanical work in pleurisy by keeping the entire side by means of strips of blister from spine to sternum in two arched layers. In cases of moderate effusion he believes causes abatement.

Dr. H. Young F. R. C. S. in reference to this plan says that it is most applicable in 1st acute general pleurisy, seen early.

2nd try pleurisy of a small area 3-20. That accompanying pneumonia on consequence of fractured ribs 4th. In advanced cases of Pulmonary fibrosis to prevent stretching of thoracic during coughing 100 relieving from 3-4.

In Pleurodyne internal fistulae.

In Pleurisy (with much effusion) the quickest (best way to) secure rest (after giving due time in abstinence) to the assistance of the fluids. Two such cases occurred recently in my practice: in neither of the cases did the patient keep their beds or consult a medical man until the

Day I saw them. One a girl of 18, thought she was getting better as her fever would not recur: the other, a woman of 46, thought she had dyspepsia: complained of pain in the hypochondrium going through to the back. In the former case I aspirated 36 oz. in the latter 120 oz. of serum. Both made rapid recoveries.

In Bethard's, in referring to the treatment of the chronic form of Bright's disease advocates absolute rest, which he believes prevents the known counterpart of flagging of mercury. This, as is an attack of dyspepsia.

Post in Diseases of the Urinary System

The treatment by rest will find an appropriate place in acute nephritis, by treatment directed to withdrawing the amount of fluid passing through the kidneys by calling on the assistance of the skin. In chronic affections - by removal of the source of irritation, whether of the alcohol excess of nitrogenous food and substituting a bland non irritating diet such as milk it will materially.
and to the return to the normal condition.
In acute affection of the urinary tract — walking rest by means of a
thermometer insulating fluids will be effective in relieving dysuria.
Sir W. Savory and Mr. Rivington advocate
rest in bed in structure of the bladder
without catheterization. In the course
of a week what appeared to be an
impermeable structure admitted a
small tongue.

Rest in Diseases of the Reproductive
Organs

The application of the principles of rest
in diseases of the female organs, had
similarly, in cases of pelvic cellulitis
following the acute especially in the
chronic forms has been most
hotly discussed by two sections
of gynaecology - those who advocate
prolonged rest in bed with a period
of recovery to enable preserving
the generative powers; and those
who advise operative interference.
Removal of the appendage in many
cases. Dr. Skene 3 in speaking of the
treatment in acute cases says: "We
should insist that the patient be
kept at perfect rest in bed, not

2. Lancet Sept. 14th, 1889
only during the period of fevered - it is easy enough then - but in
the interim, perhaps weeks afterwards in order that pathological effusion
thickening may become absorbed

Another form of rest or sexual
rest finds its application in cases
of Endometritis - the abuse of this,
often being the starting point of
both acute and chronic forms

Rest in Diseases of the Nervous System

There is perhaps no department of
medical science in which the
therapeutical value of rest is
shown more clearly or in that of
Diseases of the Nervous System. In many
diseases it is the remedial measure
that can be said to have effected
any amelioration of the symptoms
pathological state.

Under "Foreign Gunnings" the Lancet*
relates that Dr. Deen Hillstall in the
American Journal of Medical Science,
instructs on the great benefit derived
from rest in locomotor ataxia

+ Hark & Barrow - 2 - L. 306.
In cases where various accidents, closures of the thigh &c impelled the patient to take absolute rest in bed, the symptoms especially the pain, were considerably ameliorated. In some instances the course of the disease was precipitated and the sufferer from an acute attack of the disease was subjected to absolute rest without any other kind of treatment, a considerable amelioration of all the symptoms was the result.

In organic diseases of the nervous system such as Malaria, Hemiplegia, &c likeness in functional changes as Nervous Stomach, Nervous Asthenia, in Neuralgia, in Nerve irritation from overwork, such kinds as appropriate treatment by rest, mechanical, mental bodily rest, &c.

Conclusion

These endeavors to point out, imperfectly I admit, future her as the experience of physicians - chances would permit, the advantages

that are likely to be denied by considering the application of the principle of rest, in conjunction with that of other measures in the amelioration of diseased states of the body. I do not wish to detract the value of the therapeutical means we have in the materia medica, but have been to collect and arrange such of the literature of the subject as those been able to reach so that the principle which has to wide an applicability such a powerful influence in assisting the organism to throw off the morbid condition, whereby it can regain the stability of health, may be more fully recognized.