

AN
INAUGURAL DISSERTATION

ON
Intermittent Fever

SUBMITTED TO THE
PRESIDENT, BOARD OF TRUSTEES, AND MEDICAL FACULTY
OF THE

Dedicated to the Medical Faculty of the
University of Nashville,
of the State of Tennessee

FOR THE DEGREE OF
DOCTOR OF MEDICINE.

BY
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OF
Tennessee

1856 y

W. T. BERRY & CO.,
BOOKSELLERS AND STATIONERS,
NASHVILLE, TENN.

Dedicated to W. H. Bowling, M.D.
Professor of Theory and Practice of
Medicine in the University Nashville.
Medical Department.

In selecting a Subject for my
dissertation - I must confess that
I have been somewhat puzzled -
Not so much as regards the Selection
of one of which I could scribble
something, but one that while
I studied it would be of some
advantage to me in after life

Intermittent fever is
the Subject I have thought
proper to select - which though
a simple disease still from its
frequent occurrence and being
confined to no particular
region should be well understood
by every one of us - for each one
will be after called upon to
prescribe for it -

This disease commonly

called chills and fever has as to
 its cause long been a subject
 of contention among the knowing
 ones— and though for a long
 time all claimed to understand
 the treatment; but few attempted
 to trace back its oregon to
 any certain cause; and those
 who did have signally failed
 for the plain reason that
 they dealt in supposition and
 theory ~~instead of~~ facts. Well could
 they tell the symptoms and from
 them determine the treatment
 indicated— but beyond this
 all was guesswork— But now
 I believe it is the generally
 received opinion that the "vis
a fronte" the primitive cause is

due to the injurious effects of
Malaria; but as I do not wish to
enter into an inquiry as to its cause
I will endeavour to give the
Symptoms - pathology and a treatment
which from my own limited
observation together with what
information I have been able
to obtain from books and
living Physicians who seem
to understand this disease has
been found to be very beneficial
in curing this disease. too often
called Simple. - Though Intermittent
fever "per se" be but a slight
affection - Still when we find
it complicated with is often the
case it is more difficult to be
managed, and instead of yielding

readily to medicine hastens the
victims to steady death— And even
when it be simple or ^{un}complicated
it lays the foundation for many
of our most serious chronic
complaints— for this reason
Should it be checked as soon
as possible— which by the use
of but little medicine properly
administered may be easily
effected— and that bloom
which has by degrees faded
from the cheek, and whose throne
is now occupied by a Sallow
pallor, soon be returned to its
wonted seat. This disease is
divided into four stages Cold
Hot Sweating— and Intermision
in which the patient from all

outward appearances seems to be entirely clear of disease: but as the paroxysm returns at regular periods - which in each person may be different - we may expect the return of the cold stage. The patient feels himself weak and listless - He begins to yawn gape and stretch - His mind is less active - and external senses seem more or less dull - very soon a sensation of coldness - first along the back - He will complain of coldness before others who touch him can perceive it - Then he becomes really cold - the temperature falls perceptively to others - The skin becomes rough - This is altogether a state of debility

- and consequently the pulse is weak and sometimes slow. The breath is generally short.

In the cold stage the blood has receded from the surface - and probably from the small vessels - so that it is accumulated in the large vessels of the interior -

After this the skin relaxes - it regains its warmth - colour and sensibility - and the pulse becomes quick and fuller. The heat colour and sensibility of the skin go on increasing until they exceed these natural standards. The pulse grows full and very rapid. This is the hot stage or that of reactionary fever -

After which by degrees the skin becomes softer - grows moist - and the moisture augments until at length the person is in a profuse sweat - After the sweating has continued for an indefinite time - which acting as a refrigerant - by its continual evaporation sending a thousand degrees of heat latent causes the surface to become cooler and the pulse to grow gradually slower - The sweating and all other symptoms diminish - The appetite which is generally absent in the three first stages now returns - And the patient is near as well as though nothing had happened - These are the leading symptoms and

I now will endeavor to note
the lesion produced upon the
System = First after the continu-
-ance of the disease for some time
we can detect an enlargement of
the Spleen which may be obser-
-ved by feeling over the left
Hypochondrac and lumbar regi-
-ons; also a sallow paleness of
the Skin - Now from the anat-
-omy of the Spleen we can not
see what could it to become
so engorged - unless the liver
fail to perform its office and
from the appearance of the skin
we are only more sure that the liver
be torpid - and this from accur-
-ate observation has been found
to be correct - but as to the cause

of this torpidity we must acknowledge our indebtedness to chemistry for having pointed it out - When a chemical examination of the contents of the gall bladder of one who died of this disease be made there is found wanting Taurine one of the fixed ingredients of healthy bile - a substance alkaline in its reaction - Then as certain constituents of the bile are formed from the blood by the liver for the purpose apparently of being again absorbed at some part of the surface of the intestinal canal; and as Taurine is the only constituent of the bile found wanting - Which upon close examination has been found to be

Chemically analogous to Quinine. Thus we see the lesion is that of a want and not of any active morbid process. And these are the circumstances, ^{which} render it likely that Intermittent fever may be curable by the supply of that want.

As we have found that there is a want of Taurine - which seems to be an active tonic or stimulant to the liver - to which conclusion we are forced to come - by noticing that which follows its absence - first the liver ceases to act - becoming torpid - and the portal circulation is in part retarded which forces back to the spleen through the Splenic vein the blood which if not obstructed by the torpidity of the liver would pass on to the heart - Thus we may account for the enlarged

condition of the Spleen— and as the liver cease to perform its office colouring biliary particles. which it was the duty of the liver to eliminate from the blood, is permitted to pass on in the general circulation. and being deposited in the skin gives rise to the phenomena of sallowness— and to this torpidity may be also placed all of the symptoms of the disease— for standing as it does as a lock or dam to the portal circulation. and ceasing to act causing the portal system to become engorged— therefore retaining from the rest of the system the blood which should pass through it and at the same time receiving its due proportion. consequently there becomes from the diminished supply of blood

to the skin and extremities a collapse
of those parts - which will account
for the cold stage - but as the portal
system becomes so much engorged by
its own elasticity and vital power endeavor-
-ing to throw off this congestion for-
ces the blood through the liver and
then comes the reaction which is the
hot stage - and the system seeks its
equilibrium we have the sweating stage
and then the person is again well - No
not well but relieved until the portal
system becomes again congested - which
seems to happen periodically - But while
the liver was torpid - we find the Bladder
Bladder also to be filled with unhealthy
bile - Now this is the pathology of
the disease - how are we to remedy
this; what are the indications to be met

First let us empty the gall bladder of its unhealthy contents - this can be most speedily effected by administering an emetic - which we all know by acting on the stomach setting it in motion, cleansing it - and emptying it of its contents - also causing the contraction of the abdominal muscles which so presses on the liver as to force out the contents of the gall sack - then as we wish to arouse the action of the glandular system - and more especially the liver, this we find to be most readily done with a Mercurial purgative which is known to act directly on the liver, stimulating it to active exertion -

By this we have filled the second indication; and now it still remains to fill ~~other~~ indications for we find

that the vital powers are some what below there normal Standard - and that the paroxysms are periodical - then we wish to administer both a tonic and an antiperiodic - Since the introduction of chincona and artich which is found to possess both of these properties - acting as a tonic and at the same time preventing the return of the paroxysm it soon becomes the generally adopted remedy - but now its use is superseded by Quinine a salt prepared from the bark of chincona which retains all the active principles of the bark - and which as I have before stated is found by chemical analysis to be very similar to the missing ingredients of the bile - Taurine - then I think that as the original lesion

was that of a want it may be cured
by supplying that want which Quinine
seems to accomplish - acting as a
curative and not as ~~some~~ suppose
as a prophylactic - and in all diseases
it may ^{be} said that Quinine is used
there is a failure in the secretion
of bile - and the contrary of this
will also hold good that in all
cases in which there is a failure in
the secretion of bile Quinine is found
serviceable - Thus you see that we have
fulfilled every indication in Intermittent
fever "per se" and as regards its com-
plications they must be treated
"pro re natu" meaning each indica-
-tion that may arise by a care-
-ful diagnosis - and even after the
return of the paroxysm is prevented

by the curative effects of the Quinine
it may be even necessary to direct
your treatment to the reduction of
the spleen which by long engor-
gement may have become indurated.

Then from this you will see that
I believe that Quinine from the
effects that it exerts upon the
System, fills the place of Taurine
which by action of malaria has
been removed. Therefore as it
remedies the abnormal want acts
the part of a curative and that of
a prophalactic - which means a
something that depends - and
therefore to be a prophalactic
we must consider each chill a
distinct disease disconnected with
the previous or following one

But this we find to be different -
for as long as Taurine be wanting
the patient is diseased - and
has what might be termed the
malarious dysathasis - and this
may be supplied by Quinine Arsia-
nic and several other therapeutical
agents - which are rather similar
to or by the actions of the secretions
of the alimentary canal converted
into Taurine