INAUGURAL DISSERTATION,
on
Intemmitting Fevers

Submitted to the
President, Board of Trustees, and Medical Faculty
of the
University of Nashville,
for the degree of
Doctor of Medicine.

By
James Rodgers Russell

of
Georgia

March 1857

Charles W. Smith,
Bookseller and Stationer,
Nashville, Tenn.
Intermitting Fevers

This is a disease with which the profession has been familiar for ages. It belongs to the class of fevers called idiopathic, not depending on an inflammatory condition of the system nor on phlegmosis of any of the vessels of the body but supposed to be the result of a peculiar poison emanating from decaying vegetable matter when subjected to the action of heat and moisture. It is a disease of southern latitudes and hot climates being met with rarely in northern latitudes but is said to be spreading gradually in that direction.
Intermittent fever is divided into several varieties by the most of writers. Three of which I will notice. The other divisions being of no practical importance. These are first, the Quotidian which recurs every twenty-four hours. Second, the tertian which recurs every other day or once in forty-eight hours. The Quarten is what is familiarly known as third dayague or has one paroxysm in twenty-two hours. The subdivisions of these varieties have been noticed by the writers on this disease. Such as the double Quotidian, double tertian and so on.
But I do not consider these
diversities really necessary.
Intermittents have three stages
called their paroxysms. These
are the cold, the hot, and the
sweating stages. The manner
of the attack is often different.
In one case it may be insidi-ouc
making its approach
gradually. The individual feeling
indisposed about the same
hour for several successive
days. At another time the
disease will make its attack
without any premonition,
being ushered in suddenly
by a chill or shake.
The approach of the cold stage.
of an intermittent may usually be known by the feeling of languor, lassitude, yawning, stretching and so on. The cold sensations soon make their appearance on some part of the body; most usually the fingers, toes, ears, and tip of the nose give the first evidence of the chill. No matter on what part the first impression be made, it soon spreads successively over the whole surface. The countenance of the patient becomes very much changed, expressive of anxiety and suffering. A common attendant is pain in the head and...
back the suffering is not always great—there is a desire for cold drink notwithstanding the mouth and tongue are moist. The surface of the body presents a rough appearance occasioned by what is called ague bumps the pulse is considerably altered becoming small frequent and fible the teeth chatter and the patient often has a complete rigour. After the continuance of these symptoms for a longer or shorter time the hot stage commences not abruptly but gradually the patient feeling sensations of warmth pass
over him these continue to occur until the hot stage is fully developed. The patient now presents quite a different aspect. The face is flushed, the eyes sparkle and occasionally become red. The patient suffers with intense pain in the head, back &c. The heart's action is greatly increased, propelling the blood to every part of the system. The pulse becomes full, bounding, strong and more frequent than natural. The secretions are now diminished, the skin dry, hot and parched. The tongue and mouth are
also very occasionally an inconstant desire for cold drinks
The breathing is hasty but more regular than in the
Cold stage. The heat stage
passes gradually into the sweating the first appearance of
perspiration is on the upper
lip forehead neck from whence it spreads successively over
the whole surface of the body
The sweating may be slight or
profuse and prolonged. I have
seen cases in which the pers
piration continued up to the
time of the next chill
But these cases are rare
The above is the most usual
Course of an intermittent
But there are exceptions to
the rule one of which I met
with last season which I will
give in detail.

One evening last August a
patient of mine called to see
me in relation to his son who
he said had a singular disease.
From the description he gave of
the case I supposed it to be inter-
mitting fever with convulsions
preceding the paresis.

On the following day I went to
see the patient and when I went
in the last was up and going about.
Shortly after my arrival he took
his beads and complained of feeling
unwell called for water and would have fainted if I had not objected. I was by the head side watching every motion. At length I saw a spasmodic jerking of one leg which increased by the intervals becoming shorter. I also discovered the breathing becoming more hurried. Not long afterwards the other leg began to jerk near the arms and soon until the whole frame was in motion. He threw the cover off opened his shirt and complained of heat called for a fan which his mother brought and used with all her strength without being able to satisfy him. The heat being so great.
The strange feature in the case
was his complaining of excessive heat
and yet every symptom of chill
present. The signs chattering of the
tooth, catching of the breath, shrunken
countenance, the gossamer flesh appear-
ce of the skin, in short all the
symptoms attending that stage
except the chilly sensation
I formed my diagnosis called it
a case of hot ague administered
the usual remedies for intermittent
and the boy got well.
The course of intermitants are
variable. The febrile stage if some
lasting but a few hours while
others are lingering. Some eighteen
twenty-four and some thirty-six
hours neither do they always make their appearance at the same hours of the day. While some anticipate others are retarded. Most authors that I have read say that the chill does not make its appearance at night usually jumping from one evening to the next morning. But this rule will not hold good. I have at one time last autumn seen five or six cases in which the chill made its appearance between twelve at night and six in the morning.

The severity of an intermittent chill depends much on the locality. In southern they often prove fatal owing to concentration of the cause.
producing them. But in temperate climates and northern latitudes they are most usually controllable. The effects produced by protracted intermitents or by the often recurring of the disease are said to be an engagement and indication of the liver and spleen. And thereby descending the whole system. The cause of intermitents is a matter of some dispute. While most of the profession are willing to admit it to be the result of marsh miasmata, there are others who think that heat and moisture are also sufficient to produce the disease without vegetable decomposition being taken.
into the list. There is one point which has been clearly proven that is this: that in the localities abounding with vegetable remains the disease is not only most prevalent but also malignant.

Every practitioner must have observed that in the vicinity of mill ponds and stagnant pools of water intermittent fevers prevail to a greater or less extent. Whether the originating cause be Malasia or heat and moisture I shall leave the wise to determine.

The treatment of intermittent fevers is divided into that which is necessary in first the cold, then the hot and lastly that which is required.
in the interval.Unless complicated
the disease is by no means difficult
to cure. The complications that are
most common are Gastro-enteritis
Cerebritis Pneumonitis Hepatitis
and so on. The complications
will be known by the symptoms
of each being present. And will
require the same treatment as if
there were no intermittent present.
It seldom interferes with the cold
stage of the disease unless it be unusu-
ally severe or protracted. But under
these circumstances I resort to stimu-
late both internal and external.
I think it best when it can be avoided
with safety not to stimulate.
For the reason that it causes the
reaction to be greater. But when
the hot rage makes its appearance
we are loudly called on for aid.
To cut short, the prurition if possi-
ble should be the first object of
the Physician. But he will not al-
ways be able to succeed, but may miti-
gate the sufferings of the patient
by relieving thirst with effervescing
draughts, sponging the surface
with cold water, and if the arterial
action be great and there should
be danger of phlogosis of any of the
vital organs bleeding from the arm
should be resorted to.
I have used calomel and opium
in broken doses to assist in cutting
short the hot rage by delirium.
to the surface and promoting perspiration I usually give two grains of calomel in the three or four of water, every two or three hours until three or four purgations have been taken. If it should fail to act on the bowels in due time assist it with a small dose of salts or oil.

The object is threefold. To determine to the surface, promote the secretion and to remove from the alimentary canal any offending matter that may chance to be lodged there. And thereby the better prepare the system for antiperiodics of which ipecacuan is the best. All agree as to the utility of this drug in intermittents. It used alone or in combination with other
remedies of the class. When there is no inflammatory action present, use the capriccium and zincum, believing that the capriccium not only assists in preventing the recurrence of the paroxysm but also prevents in a great many cases the disagreeable effect of zincum when given alone. The manner in which it is administered the medicine is in powder, say five or six grains of zincum with three or four of the capriccium. Two doses to be taken in the interval of one hour and a half or two hours before the chill is expected. With this plan of treatment I usually succeed in stopping the attack.