On Intermittent Fever

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The respiration continues to be hurried and quickened, the hand is absent and relaxed. Occasionally there is delirium. In a debilitated constitution drowsiness and sometimes deep coma supervene, the mouth and fauces are dry and clammy— the thirst urgent— the urine clear yellow and colorless, and does not deposit a sediment on cooling. The defecation are dark and bilious and at the conclusion of the attack nausea and sometimes vomiting are experienced. After this state has continued for a time, the chilliness abates—the Thermos alternating with flushes of heat—the skin becomes its proper color and the features their ordinary expression, the heat gradually advances until it entirely predominates. The average duration of this stage is from half an hour to four hours.

The Hot Stage

By degrees precede the hot stage, the reaction continuing the face becomes hot, flushed and turgid—the skin dry, the temples throb—the pulse is full, strong and rapid, and the temperature much above the natural standard; it has been observed as high as 110° or 112° F. The breathing is deep but oppressed, the urine scanty and highly colored.
The tongue dry and parched and excessive thirst is present; the patient is feverish and restless. The senses except in delirium being very acute. The hot stage varies from three to twelve hours in duration.

The Sweating Stage

The skin becomes its natural softness. The forehead, breast, arms, and legs become moist, and the patient feeling as if soon relieved by a cough. The pulse though full loses its hardness and frequency. The breathing is free; the heart ceases the tongue is moist, and the patient feels both refreshed and the urine plentiful, but tinged depositing a light red calcareous sediment. The other general symptoms abate. The appetite returns and a feverish state of apyrexia is established after a time the sweating ceases and the patient feels nearly well though much debilitated.

It will not be necessary here to enter into the various anomalies that may be caused by difference of constitution, climate or locality. These are chiefly the ordinary symptoms in the three stages of Intermittent.

The early symptoms all indicate nervous debility as evinced by the running feverishness. As a consequence of the retrenchment of the blood
from the superficial capillaries the skin became red. The difficulty of breathing may be accounted for by the state of congestion of the larger and internal vessels caused by the accumulation of blood in them. The hot may bring on the thorough stage from the strong action of the heart.

The disease is usually more or less regular differing in duration in certain cases and giving rise to each variety.

1. The Quotidian. Occurring every day or every twenty-four hours—this is the most exhausting form.

2. The Biclinian. Every other day or every forty-eight hours. It is the mildest form.

3. The Quarantine. Every third day or every twenty-four hours—this is the longest in duration.

The intermissions are shorter in this variety and the paroxysms longer-lasting. Continuing occasionally for eighteen hours. They commence usually in the morning with a feeling of chilliness, nausea, and abdominal uneasiness continuing for about three hours. In the hot stage there is thirst, heat, and lasting for about two hours with a gentle
Fever is not uncommon as the febrile stage, the whole course usually from four to twelve hours. The preceding intermission lasts the same time except in severe cases when it may not be more than six hours.

The Autumnal and Winter attacks are more severe than those which occur in Spring. There are many minor divisions as intermittent approaches the form of remittent, but these are unnecessary complications.

2. The tertian

This is the form most frequently met with. The paroxysm begins at noon and lasts from six to eight hours. In the tertian the rigors are usually very severe, attended by acute lumbago pains, and the cold stage terminating by vomiting. It is not often more than from half an hour to one hour in duration.

This is the mildest form of intermittent, especially so during Spring as it may subside after the fourth paroxysm or from the fifth to the sixth. A vesical eruption occasionally precedes its departure. Any slight cutaneous affection about the mouth and nose is a critical sign. This type more frequently affects adults and those of robust sanguine.
disposition than other. Sometimes it is complicated with diseases of the stomach, liver and intestines.

The Quaran

There is in this form an intermittent every two hours, the fever lasting from five to nine. Often beginning between two and five in the afternoon.

The cold stage is longer in proportion in this man than in the other. Being but not so severe as in the tertian. The shivering sometimes does not occur. Often after the first and second paroxysms. The cold stage may last two hours but is not often attended with diarrhoea or sickness. In that stage there is not so much as an indication as a disagreeably dry heat nor in the bowels any great amount of perspiration. It does not often appear in spring but generally in autumn. Atracting those chiefly who are advanced in years and of a melancholic habit, it is the most unmanageable of all the types of tertian. Sometimes remaining thus the winter until the following spring but is not often fatal.

Thus the tertian usually begins in the morning. The tertian
at noon and the Quarten in the Afternoon.

The duration of the paroxysm in the Dicotidian is ten or twelve hours in the Septian six or eight hours and in the Quarten four or six hours. The length of the paroxysm in these cases varies inversely to the length of the Cotid phase also inversely to the length of the interval.

Besides varieties in type there are other deviations from the normal paroxysm.

It may be incomplete. Some of one or more of its stages or one type may be transformed into another. It may assume an entirely form evoking no determinate type or order of succession in the paroxysm. The hypotonic Tetanic or other paroxysmal complaint may be combined with it assuming a periodic character from the same exciting causes. Ages are well common in Spring or Autumn. The Australian in Spring the Quarten in Autumn. The Tertian may occur at both periods.

Persons of all ages are liable to them, though they may not be equally subject. Those of middle life more frequently than others and men than women, probably from being more exposed to the exciting causes.
Of the modifications of Salmonella, the most important are 1. The Inflammatory 2. The Congestive or the Malignant Form.

1. The Inflammatory Modification

The intermissions are attended by peculiar symptoms although the deceasing stage may have been complete; the pulse is quick and thready; the breath constant; the skin dry and heated; the system irritable; the temper irritable; the tongue red and coated; there is head ache also aching pains often affecting the extremities and sometimes that cough and pain in the chest. The rigors are strong and frequent, attended with vomiting; the paroxysms protracted and the intermissions shortened.

2. The Congestive Form

Is a dyspeptic in its character. The cold stage is protracted and introduced by vertigo; there is deep seated pain in the head and general trembling; the pulse is small and weak often pain in the bones; the hot stage is slow and imperfectly developed; the surface of the body cold and the internal parts heated and available. This modification of ague does not occur often except in hot climates. It is extremely fatal.
3. The Malignant Fever

After the second, third, or fourth paroxysm, the old stage becomes shorter or more intense or very prolonged, the phenomena attending the febrile accession are not so apparent; but symptoms of local irritation not before perceived are now developed; there is no distinct delirium, but a fretted, odor aslates from the body, the patient becomes less appetitive and does not complain of much uneasiness, but on the succeeding paroxysm, colliquative hemorrhages and hectichia appear. Death frequently takes place at this period, or is hastened to the third fourth, or fifth paroxysm.

Local complications with inflammation often occur from some peculiarity of the atmosphere or character of the local chassmatate, or else it is modified by individual idiosyncrasies. Persons of Ptolemaic habit being liable to have the brain affected with a disposition to delirium. Those of a nervous temperament are subject to shaken twitching, of the tendons, or others. Predisposed to phrenmnatism, are affected with arthritic pains. Very often gastric symptoms are observed caused by inflammation.
of the mucous membrane of the stomach inconvining
after a short出租ing fit and at the commencement
of the hot stage this is accompanied especially
of the fever is affected with destruction of strength
able pulse. Shrink voice and cold extremities
When cerebral disease attends intermittent
uterus pains are felt over the frontal region
and orbit there is a great sensibility to
light and the retina is irritable. There is
also intolerance of sound and... |
When aware of the Pulmonary organs accompanies intermitent there is during the paroxysm great pain in the chest. Dyspnea, Cough, Heart. Dry tongue variable pulse and general weakness and chilliness when the fever is combined with Pneumonia and Hypothermia it is most dangerous. If complicated with Catarrh the difference will be that the Cough is not dry the eyes turn suffused and the face red and swollen. If with Asthma Inspiration is often so difficult as to threaten suffocation. If with disease of the heart there is palpitation and the drenches except that of hearing are deadened. the pulse and inspiration almost to have ceased the pulsations of the heart are much diminished. This state may last from a quarter to an hour or two.

In a variety termed Syncope all knowledge of impressions for a short time are lost. this is followed by languor and inability to recover. The symptoms of the paroxysm of a fainting aigue are a sudden quick pulse, the eye dull and Brenten and profuse inspiration over the head and neck. This form is often fatal in four or six weeks.
The spleen is frequently diseased in Intermittent.
The excess of its enlargement and congestion is vulgarly termed agaro cake—sometimes
remaining after the disease has subsided.
There is a tumefaction in the left hypochondrium.
the skin is of a dull clay color. the face
blotted. debility and listlessness pervade the
whole body and the feverish accessions
are hectic in their character.

Diagnosis

The only disease liable to be
mistaken for Intermittent are Splenio,
Remittents and Febrile focus.
The first known by the multiplicity of its character
and steady resolution. In Febrile focus there is
at no time complete Apoplexy nor are the
cold and sweating stages distinctly pronounced.
In febrile the feverish accession takes place
daily and in the afternoon or towards night
the sweating stage is more prolonged and
the pulse is small and rapid during the
Intermission.

Progress

In this Country when uncomplicated
with local diseases it is usually favourable
to persons of previously tolerable health
and strength. In warm Countries it is
Much more dangerous and sometimes rapidly fatal, often accompanied by those affections of the head - Stupor, Delirium and Convulsions. Also of the alimentary canal with Diarrhea, pictures and sometimes black vomit. When fatal, Intermittents are generally so in the Cold Stage. Cerebral congestion supervening it terminates in coma or Affright.

Quartans are the easiest to cure, Quartans the most obstinate and least dangerous. And Quartans the most fatal.

The favourable indication are regularity in the progress and recurrence of the Parasymptoms or in their being retarded. Complete reaction after the Cold Stage during interval. The organs of digestion unimpaired and the Stomach and Intestines free from any Appearance of inflammation. The Return of discharges which may have been interrupted and a liquor eruption about the mouth and nose. The Prognosis is unfavourable when the Parasymptoms occur irregularly or have a tendency to assume the Recurrant or the Continued form: this being often caused by the superinfection of some general or local inflammation. General debility, except rigging, once debility are also very
Unfavourable indications

The Terminations

Depend much on the strength and constitution of the patient - the duration of the disease and the malignancy and violence of the exciting cause. Intermittents have a tendency of themselves to a favourable termination. Quotidians on the seventh and Seventh on the fourteenth day often extend to the sixth week. Sometimes an obstinate and autumnal ague is superseded by a remission and the appearance of a scaly or vesicular eruption about the nose and lips is considered critical. If the disease be protracted the appearance of these under its sequelae is well marked. The face is pale and edematous. The skin inelastic, sallow and flabby, the eye yellowed, the tongue brown and white in the center, the pulse feeble, quick and thready. The appetite capricious. The stools very offensive, either clay like or of a dark, liquid color. The urine scanty and tinged with bile. The perspirations of a fetid character. The abdomen turned and atherous of pressure and the respiration short, with a general appearance of debility.
In hot climatic death often takes place during the winter. In a certain case, if the intermittent is obstructed and prolonged it is apt to give rise to phlegm disease when death occurs it is either from the severity of the disease lasting up to the vital forces or from their being exhausted by the effects of some local lesion. In the Quatrain type the occurs during the cold stage in the others during the hot stage or the fever of intermittent.

The morbid appearance after death are:
Inflammation of the serous membranes and of the substance of the brain, hepatic alterations, inflammation and ulceration of the mucous membrane of the brain, and enlargement of the spleen.
Dr. Bally found in most of those he examined who had died of intermittent inflammation of the brain and undue vascularity of the substance of the brain. Red spots were frequent and nesalisation was occasionally met with. The vessels of the brain were often gorged with blood and serous effusions were frequent among the convolutions and sometimes were found in the ventricles. The lungs were generally healthy and the heart occasionally thickened and placed.
The liver and spleen are the organs most commonly affected.

The liver sometimes greatly enlarged having been known to weigh nearly eleven pounds. It has been found covering the stomach and intestines extending into the left hypochondrium and adhering to the spleen. Its surface is either increased or diminished having usually a brown or black appearance and filled with blood. Sometimes purulent deposit are seen in its structure. The hepatic ducts are often injected thickly and filled with dense dark colored bile as is also the gall bladder.

Its inner surface is occasionally ulcerated and inflamed. The spleen lesions of this organ are most frequently seen with fatal cases of intermittent. The consistency and size is increased. Its structure easily torn the interior composed of a blackish red pulpy mass. About six years since Dr. Bennett met with a case in the Tulbourn of a man who had died of intermittent whose liver and spleen each weighed eight or nine pounds. The structure was healthy and the vessels full of white blood corpuscles. Morgagni mentions having at a similar distance seen the spleen to weigh eight pounds. Sometimes it is ruptured by a longitudinal
Pressure and the broken down tissue has been found in the abdominal cavity.
The pancreas is often hardened so as to resemble a shrink

The stomach is frequently inflamed especially about the pyloric and greater curvature.
In the duodenum there are sometimes appearances of inflammation.

Influence of age Sex Climate Season etc

All ages except infancy seem to be subject to the attacks of tertian tertians. The tertian tertian tertians frequently attack persons of advanced life.
The tertian tertian tertians and the tertian tertian tertians and aged people. It is not considered generally to have any particular influence though during an epidemic in the years of 1766 the female servants were nearly exempt.

I have frequently observed the same of late years in the houses of farmers situated in the midst of the fever.

Climate exert great influence. In hot climates tertian tertians are more fatal. Life being endangered by the violence of the symptoms during a paroxysm. In cold climates it is of longer duration and more obscure, occasioning general derangement and debility.
Sir John Pringle observes that Ague is more regular where the rebellations arise merely from aqueous evaporation than when mixed with that of decomposing organic matter.

Season has also a considerable influence. In Britain during the Winter and Spring quarters the disease is somewhat rare but increases toward the Summer Solstice after which it decreases in a short time, then increases and continues during the Autumnal equinox it again subsides during Winter.

Pathology

It is a true idiopathic fever having no local seat.

Some believe it to depend on a local inflammation of an interstitial character. As inflammation of the mucous membrane of the digestive canal or of any of the abdominal organs.

Combine A late opinion is that it is caused by congestive irritation of the liver and spleen.

No doubt during the febrile period congestion takes place but this is more probably the effect than the cause. Though we often find during and after intermittent congestive enlargement of the liver and spleen in very many cases there is nothing of the kind to be detected.

Others believe that the phenomena are...
Induced by the influence of specific causes on the nervous system.

Another view is that they depend on congestion of the capillary system.

It is obvious from these conflicting opinions that the proximate causes are still obscure and that the nature of intermittent and the laws which govern them are not yet clearly understood.

Predispensing Causes

Febrility is one well-known predisposing cause; persons of robust constitution and active habits being frequently exempt. The strongest of all is that of former attacks of Intermittent upon the system.

Perhaps I may be permitted to mention my own case in illustration of this. During the summer of 1849, I returned to my native town in the Isle of Ely, situated in what was formerly the heart of the Fens of Cambridgeshire. That year the Intermittent was very prevalent; the majority of the inhabitants suffered from it and I had two different attacks of the tertian variety. After my return to Edinburgh early in the summer of 1849, I took on baking at Portobello, during the prevalence of an
Eastern wind and was immediately attacked by a severe fit of intermittent fever at that time. I heard not hear of a single case of intermittent in the neighbourhood. At the end of the Summer Session, I travelled from Here to London. The journey was stormy and by remaining most of one night on deck I restored myself to rest at sea. On reaching London many soldiers again returned. These several illnesses soon yielded to antipathy cases of Saltphwool.

Among the predisposing causes there may be mentioned exposure to cold and the prevalence of an east wind.

Exacting Causes

It is generally admitted that intermittentts are due then origin to a certain morbidie agent or invisible effluvia arising from the surface of the earth. They termed malaria or marsh miasmata from their constant location in swampy districts giving rise when in a warm form to intermittent but in climates where they are more abundant to remittent and intermittent fevers.

Of the physical or chemical properties of the malariaca is known they are most likely gaseous. A certain temperature is necessary for the production of this agent. It is not
Found within the Arctic Circle are the colder regions of temperate climates, seldom beyond the 36th degree of North Latitude, requiring a temperature higher than that of 60°F. The nearer we approach the equator the more pregnant and violent it becomes in this country giving rise to Intermittent Fever in Spain and on the shores of the Mediterranean to Remittents and under tropical heat as in the West Indies to yaws of the Contagious Form. It also requires a certain degree of moisture for its development in England being most common in Kent, Essex, East Riding of Yorks, Lincolnshire, Cambridgeshire and Huntingdonshire, where the Chances are often overwatered with water in the Fens of Lincolnshire, Huntingdonshire and Cambridgeshire. A few years since aque was so common near at certain seasons of the year chiefly in the Autumn and Spring few persons escaped being attacked. Strangers visiting these parts of the country from a distant were almost sure to experience the effects of a "Far Aque." In addition to the Fens and Fallow waters which there abound after heavy falls of rain or snow causing a large accumulation of water inland the outlet at the mouth of the rivers becomes nearly choked up with
ice or the lakes being unusually high causing an obstruction to the egress of the inland waters the country is overflowed for a distance of many miles appearing with the exception of a few elevated spots like one vast lake. The course of the roads being marked out by poles on either side for those who wish to find them. On the subsidence of these floods and as the warmth of the weather increases the malariaic ebullitions extending over a considerable tract of country produce a wide spread epidemic. I have observed the Benga la people almost entirely on the canals. Carts and branches of kivas passing through these marshes as well as fowlers who gain their livelihood here and in the fens are generally exempt from intermittent. It being chiefly confined to those living on the borders of the low lands that have been flooded in winter since the carrying out of an extensive system of drainage by which most of the Theres have been emptied and the swamps rendered fertile. Inhabitants in a long time almost entirely disappeared. The mortality has been less than in almost any other part of England. The inhabitants of many men towns are noted for their longevity. Within the last two years the Cane has
returned spreading very extensively over its former launts - this may perhaps be due to the fall of an unusual quantity of rain causing lands which for a long time had been dry to be again inundated. The cattle and sheep have very much withstood these changes. A wet season invariably causes rot and other epidemics. The London Ague is now rare, this formerly it prevailed there extensively. James the first and other promenades both dead of it.

Other places of infection are the coast of Holland the Furtive Masters near Rome. The district called the Cholera on the Mediterranean Shores - formerly among the rice grounds of Egypt they are now abolished by government on this account - some parts of America. China especially among the hilly ground - and India during the extreme heat immediately after the rains.

It is not until the margins of swamps marshes and banks of large rivers become dry that the poison is given off. Air, water, earth and heat seem necessary for the production of malaria. The decomposition of vegetable substances is an accidental though frequent accompaniment of the disease. And not by any means an essential condition for its production.
The frequency produced at Estremadura and the Mouth of Rivers where the Salt Water Issues in Contact with the Fresh. The alkaloids of the Salt Water decomposing the vegetable matter brought down by the rivers and setting free sulphurous hydrogen this is where the case is with the malaria produced on the African Coast and at the Mouths of Rivers in tropical China also than in our own Country. Dr. W. Ferguson has proved that vegetable matter is not necessary for its production.

In Holland and at Malakau we our army suffered in an unprecedented degree from tertian tertia where the toxic agent is only of a fine white sand. In Spain in 1809 several regiments took the fever from encampment in a rocky ravine that had been lately a watercourse again in the dry and sand plains of Estremadura after the battle of Salamanca the army suffered greatly also in many part of Spain one of the thirst countries in Europe and in Portugal during the Peninsular War whilst tents and huts were like sand and Hastings and Menton. Several similar cases all ending to show that healthy soil soiled with water gives our fever poison under heat.

The higher the temperature and the quicker the drying process the more virulent the poison.
Lands which have previously been very dangerous may become healthy when flooded over and high lands which are made wet and rapidly dry again produce malaria abundantly. In malarious districts aphis and remittents abound there in hot and dry than in cold and wet seasons however the difference to be observed in plants at different elevations and seasons of the year are the fever poisons all of one kind.

The answer to this is that febrile poisons of every type arise from the same poison in different degrees of concentration.

In the higher ground of the West Indies and these as in this country. As you ascend and the atmospheric temperature increases the fevers are less wet and in the hottest and lowest part the fever is Curtailed. The inhabitants find that the lower the house and the nearer the marsh the less danger there is Persons living in the higher stories of houses have been known to be affected whilst those on the ground floor have escaped. For Augusta in the West Indies is situated in the middle of a marsh while Stoneybille Barracks are 500 feet above the level of the sea and far from any marsh or swamp yes those living at Fort Augusta succeeded and Stoneybille was visited by many
Severe epidemics again. Dr. Ferguson mentions that in 1816 the garrison of English troops in Antigua was exposed in three separate barracks in hills surrounding the dockyard. One on an elevation named Monk’s Hill 600 feet above the level of the marshes, the other two on an elevation called the Ridge. One at the height of 500 the other at 300 feet. Those at Monk’s Hill actually stood at least while staying there. Those at 500 feet had scarcely any Fever but at the barracks at the height of 300 feet every one of the men was attacked with a violent fever.

Character of the Inhabitants of Malarious districts. The men of small stature refined and pale, the hair coarse and tangled, the countenance hollow and sickly, they are feeble in body and spiritless in mind. The inhabitants of Great are an example of this description. The creation may be found in the locality of the colony first of England, who are in general robust, strong and healthy. This may perhaps be due to their superior rights and good living together with a fair allowance of excellent ale with which their masters supply them when at work.

The period of incubation may be very short, as in the cases of sailors in the West Indies.
who having gone on shore for a single night 

have been attacked before they could reach their 

ship or it may extend to many months. Irish 

labourers who have been working during the 

harvest in Linclanhire or being often attacked 

after their return home on exposure to wet and 

cold Dr. Henderson mentions having seen the 

Jaipur or fever in this country in a person who 

had been affected with it in India. It came 

on once a month and bleeding would amount 

to it into a mild continued fever. 

Sometimes these fevers are of the most deadly 

character yet some persons are so little affected 

as scarcely to be obliged to keep their bed a day 

or two. There are no doubt diversities of 

miasmata capable of giving rise to diversities 

of disease though they may assume a similarity 

of appearances. It occurs in the West Indies 

in heretical missions the character of the 

season appearing to have little or no effect 

before it. There is not much known as to the 

essential nature of the gases which cause 

malaria the principal ones most likely are 


Sulphuric acid. Hydrogen hyposulphuric acid 

etc. It is a singular fact with respect to the 

malaria on individuals that strangers are
More liable to be affected than nature and in the case of the stags he appears to be proof against malignant fever — this may perhaps be owing to the different texture of the skin whose tract of marsh abounding in peat moss are entirely exempt as on the frontiers of Virginia and North Carolina and many parts of Scotland and Ireland.

Periodicity

Here are many different species bred with regard to their periodicity I will briefly state two or three.

Willis. That the intermission is due to a periodic development of homogeneous matter in the blood.

M.R. Bailey. That it is due to the modification produced in the function of circulation by the alternate change of position from the upright to the recumbent.

Dr. Locke. That they are periodic because the causes of them are periodic.

Green. That it is owing to a diurnal revolution producing a habit.

The malaria is movable by the wind.

This is often observed in tropical climates where the wind blows for a long time continually from the same quarter.

The miasmata lose their noxious properties by forming over even a small surface of water.
Most likely absorbed by it. This has been noted by sailors when anchored even a short distance from an infected coast.

Another property of the poison is its attraction and adherence to lofty, few-leaved trees.

This may happen in malarious countries to go under and still more so to keep under them. In Guiana Settlers live fearless to the lee of immense woods close to the most pestiferous marshes. New Amsterdam in Barbice lies to the lee side of an immense swampy forest in the track of a strong trade wind yet the inhabitants fear no fever.

Culture of the soil seems to have an important effect on the generation of malaria as has been observed in Port Lachlan in Scotland and in many of the fenny districts of England. The fever has also been observed to decrease in proportion to the increase of the population.

Treatment

In the 3rd Stage -

The effects of nature should be aided by inducing a quick reaction, thus checking on the hot stage which must soon be diverted into the sweating. Warm dilute and tonic drinks should be given and external warmth
applied in a variety of ways. A hot bath or a
pediluvium is very useful - the patient should be
placed in a warm bath with a hot bottle or such
wrapped in flannel at his left groin with a
stimulating lotion along the spine has
been found serviceable. An ether administered
at the first approach of the 2d stage assists
much in abating its first signs, and any drops
of laudanum or solution of morphia should be
given and if warmer does not come on in
about a quarter of an hour from 12 to 15 of the
more Blood Letting in this stage has of late
years been much recommended. Among the
advocates of this treatment are Dr. Mackintosh
and Dr. Graves. The bleeding continued until
the patient feels relaxed and terminally
suffice. This often shortens the paroxysm and
mitigates its severity. An ounce and a half
are generally enough rarely to much as
twice the dose is required to be taken away.
May perhaps be permitted to quote a case
given by Dr. Graves illustrating of the advantage
of blood letting in this kind of fever.
Mary Gunnion, age 44, was in the Charity
Hospital under Dr. Stokes on the 1st of Feb.
Small areas of rash were observed that terminated
from the forehead to the posterior arm.
She then came under the care of Dr. Graves on the 1st Nov. He ordered large doses of Saltpetre. The disease assumed the tertian form. Continuing to the 14th though the dose had been increased to a scruple and a half daily she was still led to grow worse. After this the intervals between the paroxysms increased to twelve hours. Again she was led and the fit became quartan. It being repeated three times the duration of the paroxysms was shortened her strength becoming reduced she was ordered to receive Arsenicals in 3/8 gr. Martius three times a day. The paroxysms are gradually subsiding the fit being scarcely more than a slight shivering. The way consider the benefit derived from section in this case as probably due to its energetic action on the nervous system thus stiffening the liver and lengthening the intermissions. This is perhaps an extreme instance in few words it is advisable in necessary to abstract to large a quantity of blood from the patient. By small bleedings in the early stage no doubt the internal artery is relaxed and the other efforts to promote an increase in the circulation thereby assisted.
The Hot Stage

During the hot stage abates the fever and produces a profuse sweat — it is better in combination with a diaphoretic as in Powders Powder or along with James' Powder Cold and dubus drinks may be given to allow sweat. If severe local pain suprare and cutting with the advantages over this must be resorted to early in the disease.

The Sweating Stage

To a certain point the perspiration may be encouraged by this drink etc. It is become earliest by rubbing. Change of linen and getting up out of bed will check it.

This treatment will be applicable to most cases of Simple Intermittent. In the inflammatory forms more active treatment must be resorted to.

When the ague is simple after evacuation of the buirue very three grains of Calomel with about a 1/2- of rhubarb generally answer very well. Antiperiodics should be administered. An opium may be given about an hour before the expected attack. The specific remedies are Bark and Arsenic. Arsenic has been objected to on the ground of its insufficiency in the hands of the inexperienced.
but this objection of its held good attack will apply equally to many other of our most invaluable remedies. I have seen the fig.按钮[按钮] given with much advantage in Cambridge in doses of 5 to 6 ounces every four or five hours during the internment. To often check or arrest the attack. The principal advantage of arsenic is as a preventive. In case of a relapse after it has been tried or when from a peculiar idiosyncrasy of the patient arsenic cannot be used. Among other remedies that have been tried with more or less success are the sulphate of iron, the arsene acetic, acetic acid, and arsene of ammonia, the salts of iron, the better astringents, wood charcot, pyrethrum, salysal, and the case though an intense better and perhaps derived with some tonic properties does not appear to have the slightest effect, as in indolicine. Potasium and borax have also been tried. But the only real of any importance is quinia. But this has not yet been sufficiently employed to enable us to form a decisive opinion. The discovery of quinia and its salts forms a great era in the history of materia medica. It has been the custom to refer the peculiar periodic effects of quinia to its tonic action but this is without reason. Tone remedies only.
their effects developed by degrees whilst those of Aricoma may be raised in a single dose. It is, true, of itself but possesses periodic powers in intermittent and other periodic diseases. The sulphate of Quina and the Aricoma of Aricoma are absorbed in the course of their action being found both in the urine and sweat.

Dr. Christie says he has never known Intermittent resist the effects of Sulphate of Quina and very seldom has its failure in cutting it short when exhibited in large doses. It acts in a peculiar manner upon the nervous system; its subacute verties as a tonic are not necessary for its local antiperiodic effects. The ordinary dose are from three to five grains every two hours or four hours during the intermission but this mode of treatment will not yield to the diabetic effects of large and full doses. It may be given with Sulphuric Acid and Syrup of Orange or in a more elegant form with Infusion of Roses or in the form of pills the dose from (dilute to (dilute) the grains this will usually cure short the periodic paroxysms at once. Dr. Allen in Intermittent Fever on the African Coast gave six to the latter of ninety grains and with perfect success.

Two cases were lately admitted into the Edinburgh Infirmary. A man and a woman they had
both Surgeons the Intermittent from the Fever of Puccoon.
The man had it in the Quokorian form he was given
twelve four grains for the first dose but this did not
check the fever he next received a dose of Thirty-two
grains which entirely arrested the attack. Two further
doses of twenty-four grains were given him and he is now
quite well. The other case that of
the woman was of the tertiar type. Two
doses of Eighteen grains were given here which
completely cured her.

The modes of administering Guariche are by
the Rectum and the Subcutaneous method.
The latter is spoken of highly by some as
obtaining by means of two grains of Sulphate
of Bisma the same effect as a with a large
dose by the mouth, this however is not yet
sufficiently well known.

In conclusion at one state that I have
chosen the Subject of Intermittent Fever for
my Thesis not from the intention of throwing
any new light upon it from the Snall difference
a student can offer the facts having been
after tried before and well explored by men of
science and experience so that little can
be advanced but a repetition of what others
have previously stated. Within the last
few years great additions have been made to our knowledge of the Origin and Mode of Treating this disease. It is now known that the atomic giving rise is not caused by decomposing animal and vegetable substances as was long held to be the case but from a fungus soil cultivated with water which is afterward evaporated by heat. The treatment since the discovery of Fumia seems we believe to be simple enough but the method of giving it in heroic doses with Fumia is an invaluable instrument in the former mode of treatment by which however some practitioners in the Country will hardly be grateful as with small doses the disease is generally manageable and the medical benefit is that the more abundant the crops made as a day.

In the wide field of investigation there are many more novel and apparently more important, but a student has little more to offer than a few vague theories for the former and as in the latter coming from a part of the Country where Fumia is looked upon as a natural for the benefit other considerations in the desire to have a hit at a personal enemy. If we borrow weapons new they are effective when used with vigor the experience in the Performary battle has well proved.

William Marshall Spalds March 1860