1863

Rheumatic Fever.

19.\: Intermittent fever.
23.\: Remitted partially.
24.\: Indurated axilla.

31 March 1863.

John Pringle
Rheumatic Fever

Rare diseases have more attraction for some than the common and every day ailments which are constantly coming in our way, but it seems to me that common complaint should be most studied by us for we shall have most to do with them, while we may rarely or never have occasion to treat a disease which we may have spent much time and trouble in investigating. As the surgeon may never have the opportunity of operating for stones though he may be called on to heal an ulcer any day of his life.

Rheumatism is about the most common of all diseases in this country and yet until very lately the true nature of the disease was unknown, and the treatment even now a days is at best not very satisfactory. It is a contemptible disease for it is characterised by severe and long-continued pain and in the acute form is a dangerous malady on account of the serious damage done to the heart in many cases. It is a disorder of the blood arising from a vitiated condition of the circulating fluid. The nature morbus has been thought by some to be merely some normal
constituent of the blood in excess, by others it is supposed to be some altogether foreign matter. But of this we shall say more when we come to speak of the cause of Pneumatisation. Suffice it to say at present that the Materies morbi is of so irritating a nature that not only does it produce great constitutional disturbance but local inflammations are also set up in various parts of the body and serious structural change produced in the great centre of the circulation.

There are two forms of the disease met with Acute and Chronic.

The chronic is often the result of a previous acute attack though the chronic form may occur in individuals who have never experienced the disease in its acute form. This form is generally met with in the old for in them disease in general has less tendency to take on the an acute character. Their systems are not so sensitive to the irritating matter in the blood and the Chronic or subacute form is therefore more prevalent among those advanced in life.

In the young again the acute form is more common as there is more action going on in the body and the system is more sensitive and more easily roused into action by the presence of any materies morbi in the blood. From this excitability of the system in the young it has been found that the younger the patient is the greater danger is there of the heart becoming implicated. So Dr. Watson says that with two exceptions he has never known a case where
the membranes of the heart were not affected when the disease occurred in patients before the age of puberty.

We may fairly safely say that Rheumatism is hereditary. The seeds of the disease descend from father to son as much as consumption or any other constitutional disease runs in a family. So if there is any relation between the strength or weakness of the constitution of children and the bodily health & power of the parents surely a constitutional weakness in a father or mother will be inherited by the children. For as little can you expect to get good fruit from a diseased tree as expect that the offspring of a rheumatic father or mother should be entirely free from a tendency to Rheumatism. But it is often seen that members of a family escape having Rheumatism during even their whole lifetime. The seeds of the disease may lie dormant for a long time, even and sometimes the disease may never become developed but place them in circumstances where the tendency to the disease may be exercised & encouraged and the seeds will quickly spring up and manifest the latent and the unsuspected constitutional stain while others with them in the same circumstances may contract some other malady but not Rheumatism as it was there was no tendency to the production of the Rheumatic virus.

But if great care is taken to avoid all exciting causes and all depressing agencies everything which may develop the tendency to the disease or lessen the power of the system and if the interchange of tissue is properly kept
up by the taking of exercise and partaking of simple and easily digested food, the rheumatic tendency may never appear and the children of rheumatic parents live and die without experiencing either acute or chronic form of the disease. Dr. Fuller observes, "I have traced it in nearly 29 per cent among the Rheumatic patients admitted into St. George's Hospital," and Dr. Bowel has observed it in 50 per cent of the cases admitted into the hospital New. And the occurrence of the disease among the young seems an argument in favor of the hereditary character of the disease for in them the amount of new matter taken into the system exceeds the waste produced and they are not generally exposed to hard work so that in them the predisposing causes being absent we have no other way of accounting for the disease than that the rheumatic tendency has been transmitted to them by their parents.

At least this remark applies to the children of the upper classes who are cared for and well attended to. So that the hereditary disposition is seen in 1 of every 4 patients under 15 years old, 3.5 in 20-30 years, and 6.6 in over 30 years. showing that the young attacked with Rheumatic fever the hereditary tendency is almost always present while among those attacked in more advanced life the tendency is produced in consequence of their way of living the tone of their system having become unbalanced in some way or other.

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and consequently the waste and renewal of tissue not kept in proper balance thus predisposing to the production of the Rheumatic Virus.

Some have averred that after the occurrence of an attack of Rheumatism the tendency to Rheumatism is increased. Now a Paroxysm of Acute Rheumatism is an effort of Nature to get rid of a poison in the blood and when the poison has been properly eliminated the system will be stronger more vigorous and less likely to produce the same in the system. As long as the poison is accumulating in the blood the tendency to an attack of Rheumatic fever will grow greater and greater till Nature sets up an action in the system in order to throw off the irritating matter in the blood. But if the poison has been only partially eliminated the tendency to an acute attack will remain until another attack comes on to purify the system of the poison. But when an attack of acute Rheumatism has once subsided we have reason to fear a return of the Malady. For its occurrence is a sign of the constitutional tendency being present in the individual. But if after an attack the patient pays particular attention to his general health, lives simply and avoids excesses of all kinds not exposing himself to cold or damp and avoiding all depressing agencies mental and bodily of mind or body his constitution will be in the best possible state for preventing a recurrence of the Malady and accordingly some who have had an attack of Rheumatic Fever have not been visited for
many years by another. But after recovery from an acute attack of Rheumatism, the patient feels healthier, strong and in better spirits than he has been for weeks or months previous. His system has been relieved from the presence of the irritating virus and he is unwilling to be doctor'd any longer, fancying he may eat and drink as he pleases. This is owing to the popular notion that Rheumatism is only the effects of cold, which is the exciting cause though not the primary cause of the disease. Here the physician should do his utmost to regulate his patient's habits and ways of living.

Among what class of patients do we find Rheumatism most common? Clearly among those who from their way of life are most liable to get into that state of system in which the Rheumatic virus is produced. It is most prevalent among those who are exposed to all weathers who do not perhaps obtain sufficient nourishment and in whom the wear and tear of the system is great. Want of nourishment exposure to cold and damp, irregularity of life afford rich soil for the development of the seeds of Rheumatism. Hard working men, shepherds exposed to cold and damp, and all who in earning their bread or amusing themselves in shooting and other ways are exposed to the changeable weathers in this climate, are more or less liable to suffer from Rheumatism.

Women are less frequently attacked by Rheumatism.
than men, as they are less exposed to the exciting causes of the disease though both are equally liable to be attacked by it.

Climate and season exercise a marked influence in the frequency of Rheumatic cases. As the skin is the peculiar eliminative of the Materius Morbi in Rheumatism so in these seasons of the year when the skin acts imperfectly this malady abounds most and in those climates where the skin acts freely Rheumatism is almost entirely absent.

Cold combined with damp interferes more with the action of the skin than cold alone and accordingly we have more Rheumatism in May than in December.

In Nova Scotia and New Brunswick it is not so prevalent as at the Cape of Good Hope.

Mr. Malcolmson has observed that it is a rare disease within the tropics and as we approach the poles the disease is almost unknown. For in the tropics wherever the poison is generated it is straightway eliminated from the system and not allowed to accumulate and the Northern Nations live simply and from being obliged to hunt for their food keep their systems constantly in good order, and as there is therefore no Malnutrition in their systems Rheumatism cannot be produced by any amount of cold they may be exposed to.

The seat of Rheumatism is more particularly in the fibrous tissue though other tissues may become involved from contiguity to the affected parts. It is curious that a thing so invisible in the healthy state should be the seat
of such suffering in the diseased state. Being extended
over a large surface of the body the disease is attended
with violent constitutional symptoms. Fibrous tissue
is simple and compound, the simple including ligaments,
and tendons, fascia and aponeurosis, perichondrium
and periosteum. They are insensitive in the healthy state
have few vessels and scarcely any nerves. There are
accordingly various kinds of rheumatism according to its
seat of attack.

When the tendons and ligaments are the parts attacked
we have to do with simple fibrous Rheumatism or Rheumatic
Fluor. In this kind the fever is but marked, there is
great pain, swelling of the joints. The swelling is uni-
form and is external to the joint. This form of Rheuma-
tism possesses the shifting character of the Malady to
a marked degree.

When the bursae of the joints or the bursa of tendons
are the seat of the attack, the fever is less than in
the first kind, the swelling is not uniform owing
to the resistance afforded by the tendons, ligaments
round the joint as due to diffusion into the capsule of
the joint. The pain is more more limited and the consti-
tutional disturbance much less than in the fibrous
Rheumatism.

When the disease attacks the muscles with their in-
vesting Aponeuroses, there is little constitutional disturbance
and the pain is relieved when the parts are kept still.
It is generally met with in the Chronic form.
Rheumatism sometimes attacks the periosteum of bones those more especially which are exposed as for example the cranium, tibia, ulna. I have myself seen a case where the outside of the foot was thus affected.

A very common form of Rheumatism is that affecting the course of certain nerves as in Sciatica and I was lately troubled myself with a disagreeable, harassing pain in the course of the Ulnar Nerve of the left arm. This form of Rheumatism though extremely painful does not produce much constitutional disturbance. All these affections owe their origin to one common source disease of the fibrous tissue but as the symptoms which the disease gives rise to in each kind, are different so the treatment of each is peculiar and must be studied by itself. In this paper I intend to confine myself to simple fibrous rheumatism or Rheumatic Fever as this paper would be much too lengthened a production were I to go into the details of all the various forms of the disease.

The symptoms of Acute Rheumatism are very violent as we might expect from the great extent of tissue involved, but it seldom if uncomplicated endangers the life of the patient nor in general are the affected limbs any the worse after a violent inflammation at least after one attack. On the contrary the patient is improved in health and his joints though useless at the time and somewhat stiff till the ligaments and tendons regain their normal condition become very soon as supple as ever if the disease ends with
the acute attack and does not become chronic.

But in the capular form of rheumatism the case is very different for not only are the joints subject to permanent structural change but life is placed in imminent peril.

Before the outbreak of the violent symptoms there is a period of incubation. In some cases but rarely the local symptoms show themselves at once. The patient has pain in his limbs and in a short time the joints become swollen red and tender with all the constitutional disturbances present. But in a case of this kind the poison had not perhaps been accumulating in the blood but the system of the person had been suddenly put out of order by some mental or corporeal depressing agency with at the same time some exciting cause brought to bear on the system thus lowered in tone. The nervous power in a case of this kind would be suddenly depressed thus thus disturbing the balance of the system.

In other cases there may be pain and the other signs of rheumatism present but no articular affection manifesting itself. The heart may in some few instances be the first to show the true nature of the disease though in general the local affections manifest themselves after a time.

But in most cases the preliminary "twitching for the attack" as Dr. Fuller aptly styles it is well marked. For several days prior to the attack the patient feels uncomfortable
has a dull look about the eyes and yellowish dusky complexion is languid with a disinclination to do anything and is particularly sensitive to the changes of the weather, the least puff of wind sending a shiver through his frame. His Pulse may slightly raised the bowels are sluggish and the tongue coated with a bad taste in his mouth. So far the patient goes about fancering he has caught cold and attempts to throw off the indisposition he imagines it to be but the pains in limbs continue until a shower of rain or exposure to same draught set up a shivering which is followed by febrile symptoms and increased pain in the joints upon which he is obliged to take to bed.

When the attack has fairly set in the articular inflammations manifesting themselves fully the patient disease may be at once known from the position in which he lies in bed. He places himself so that all his joints are completely relaxed and motionless as his suffering is in this way relieved. He dreads the approach of any one, even a friend, to his bedside lest he should move the bed or bed clothes. He is restless yet cannot change his position. His face betokens acute suffering but has not the dull depressed look of one in continued fever. There is no delirium, at least rarely so long as the attack remains uncomplicated. The skin is sometimes hot and dry but more generally bathed in the frothy acid sour-smelling perspiration characteristic of this disease. The tongue is coated with a white fur and deeply loaded. The saliva
normally alkaline becomes acid; the bowels are constipated and when moved naturally or by physic are dark coloured and offensive. The urine is scanty, high coloured, of high specific gravity and the lithates are deposited as a red brick dust sediment. But the high specific gravity is owing to their being a great diminution in the quantity of water excreted while the solid matters in the urine retain their normal proportion. The pulse varies from 90 to 130 and has a full bounding or pulse to the skin, quite peculiar to the disease. The appetite is sometimes not much altered but in most cases is impaired; and the thirst holds a relation to the fever, heat of skin. But curious enough headache does not form a symptom in this disease notwithstanding the high fever and bounding pulse, neither is there any delirium nor any disturbance of the mental power for the mind is usually unclouded from the beginning to the end of the disease. But from the continued pain preventing sleep the patient becomes irritable towards the close of the attacks.

The local symptoms of Rheumatic fever are striking and peculiar, presenting no difficulty as to the diagnosis of the disease when they are well marked. For several days previous to the commencement of the attack the patient complains of wandering pains and stiffness in the limbs. When the attack has been fairly established these wandering pains
settle down on particular joints. The foot and ankle and next to them the knees are the articulations most commonly affected. After them in frequency come the wrists and shoulders. Some say that these joints are more likely to be attacked which are most exposed. This would explain why the hip is so seldom affected but why should the elbow suffer less than the shoulder the one being quite as exposed as the other. Those joints which are very much used will be predisposed to the rheumatic affection. Lastly I had a case of a blacksmith who had affections of the elbows and shoulders but not so much of his knees. His complaint explained the almost fitting of the disease to his elbows and shoulders. People in the upper ranks not using their arms much will have their knees and ankles more frequently affected. Sometimes one joint is attacked sometimes several one after another or all at once. About 24 hours generally after the pain in the joints has become localized, swelling commences around the joint from effusion into the adjacent cellular tissue, the hollows about the joint become obliterated and the skin becomes hot and dry, red and shining. The pain in the joint is severe and that of the articulation is tender to the touch. All the characters of acute inflammation are present yet suppuration does not take place. The swelling sometimes assumes a different character. It is unequal, bulging at those points where there is least resistance from the surrounding ligaments and tendons and is evidently
caused by effusion within the joint and not external to it as in the first kind of swelling. The reduction accompanying this kind of swelling is less and there is little superficial swelling. This disorder has been called by some Synovial Rheumatism i.e. Rheumatism affecting chiefly the synovial membranes. By others the term Rheumatic Gout has been given to it but the first name seems to express more clearly the nature of the affection. But it is quite a matter of taste as either name is sufficiently expressive.

A tendency to change its seat is characteristic of fibrous rheumatism. One joint after another may be visited by the malady or they may all affected at once. The pain generally leaves the joint first affected within a few hours or it may stay for days. It may completely disappear from the joint or it may not go completely away, the joint still remaining swollen and tender. But often the relief from suffering is complete when the inflammation has been established in some other articulation. After the pain has left the joint, the swelling rapidly disappears, the joint soon assuming its normal size. The skin is at first wrinkled and shrivelled from its previous over-distension but soon assumes its ordinary condition, the cuticle not desquamating as in Gout.

The sudden subsidence of the inflammatory action in one joint and its appearance at the same time in another articulation used to give rise to the notion that it was a disease of local origin and not as is now universally admitted produced by a vitiated
state of the blood. The inflammatory action is not set up in another joint because of its subsidence in all other
but simply from an extension of the disease. For though
the local symptoms often leave one joint entirely when
another has become affected yet as often there is little or
no diminution of the inflammatory action or it is gradual
and incomplete.

I need not here enter upon the extension of the disease to
the membranes of the heart as I am informed by one of
my fellow students that he has chosen that complication
of Rheumatic Fever for the subject of his Thesis.

The inflammation of the joints does not run on to suf-
feration though we might expect it from all the ordinary
symptoms of true inflammation being present. The redness
and swelling disappear the skin becomes placid &
moist as before and the joint soon assumes its natural
appearance free from any permanent bad effects. In a
Case of Rheumatic fever which occurred to M. Chomel, the
patient was rapidly cut off by pericarditis. As true
had been severe affection of the joints, with much swelling
during life, M. Chomel examined them carefully after
death, and describing the result he says — "l'examen
de toutes les articulations n'a fait decouvrir dans
aucune d'elles le plus leger vestige d'un travail in-
flammatoire".

The pain and fever usually increase towards
evening. Some say this is due to the heat of the bed
and room. But if the patient is kept cool and the tem-
perature of the room kept low there is the same increase
of pain and exacerbation of the febrile symptoms towards evening which precludes the notion that it is owing to the heat of the patient's room or bed, and shuts us up to the conclusion that Rheumatism being subject to the same laws as other diseases where there is pain accompanied with fever, increases towards evening not on account of the disease being increased by heat but from the influence which the diurnal revolution exercises on all diseases, there is pain & fever.

The fever and constitutional disturbance do not depend upon the severity of the local symptoms, they do not keep pace with each other. For there is often great fever before the local symptoms have appeared and when they are established, the constitutional symptoms are relieved; the pulse grows slower, less frequent, the countenance less anxious and the patient altogether easier which proves that the fever & constitutional disturbance are not caused by the local inflammations and that the fever is not symptomatic or dependent on the local affections but idiopathic.

The perspirations in Rheumatic fever have been described as useless, weakening and distressing the patient without relieving the pain or shortening the duration of the attack. It is true enough that the pains are not much relieved by the establishing of perspiration in an ordinary attack where the sweating comes in profuse at one time but in those cases where for a time there is not the usual profuse acid sweats, the pains are excessive until the perspiration has broken out when the pains are relieved.
The sweating is not critical as in some other fevers but if it is checked in any way during the course of the attack, immediately the constitutional disturbance becomes greater and the pains increase in severity until the function of the skin is again properly set going. Dr. Fuller remarks that amongst his cases at St. George’s Hospital those recovered easiest and most completely where the sweats had been profuse and having the characteristic acidity and in those cases where the sweats had been only on some parts of the body or less profuse and acid or going on for two or three days and then disappearing, the attacks lasted 6 or even 8 weeks and in some cases from the incomplete elimination or reaccumulation of freshly formed virus, the sweating recommenced after it had ceased for a while until at length the rheumatic poison was completely eliminated from the system. In a slight attack of the disease which I myself experienced after sweating profusely for several days diarrhea came on which we doubt took the place of the sweating for it stopped and after the diarrhea I felt much better. This process we initiate by giving purges. According to Dr. Fuller the duty of eliminating the poison is thrown on the stomach when extremely acid vomiting accompanies the attack.

But when occurring in weak constitutions, in those greatly predisposed to rheumatic attacks, or towards the close of some protracted cases, the sweats should be checked
for they are hurtful and weakening to the patient. The perspiration in those cases has not the characteristic sourness of smell or acidity. The skin is sodden and the pulse soft, weak, and labile.

As convalescence approaches the tongue begins to clean and the urine becomes more abundant and less as highly colored, while the lithaters diminish in quantity. The pains in the joints are not so intense or so continued while the swelling and redness disappear. The evacuations from the bowels are less fetid or dark-colored, the perspiration less acid and sour-smelling, the patient becoming easier and more comfortable until the symptoms cease entirely.

When the disease is uncomplicated Dr. Weeden says the duration of attack is six weeks and Dr. Warren agrees with him. Sir Charles Scudamore said that "in a case of which the issue is favorable the fever and pains are brought to a close at the end of the third week and in slighter attacks at an earlier period, but that when the course of the disease is unfavorable, a period of two months scarcely serves to exhaust its power of producing even acute symptoms." Mr. Chomel states 4 weeks as the average duration of the disease in his experience. Dr. Hullin says that most of his hospital patients were convalescent about the end of the 3rd or beginning of the 4th week from the commencement of the attack and left the hospital about the end of the 6th week. But with the ordinary treatment nowadays...
employed from 14 to 17 days is looked upon as the ordinary duration of an acute attack and from 3 weeks to a month the duration of a subacute attack. But there are many things which will influence the duration of an attack, according as the treatment has been judicious or the system of the patient be weak so that there is no power in the system to get rid of the poison the disease may be indefinitely prolonged.

By judicious treatment the attack may be according to some practitioners arrested. Dr. McLeod asserts that venesection will cut short the disease if it is seen early enough and there are some rare instances in which the disease gives way almost immediately under treatment but these cases are very rare and are probably due to some sudden change in the assimilative functions, Nature herself arresting and cutting short the attack.

Various complications may lengthen the duration of the disease such as pneumonia excited no doubt by the irritation of the poison in the blood which gives rise to the articulare affections. This complication may occur ferre as that it often accompanies the heart affection. Dr. Latham met with this complication in 24 cases out of 136 or 1 in 5.6.

The kidneys may sometimes suffer in Rheumatic fever where the urine is examined under the microscope in those cases we will see small fine pellets which are the epithelium of the kidney.
Inflammation of the brain or its investing membranes is another fearful complication. It is chiefly developed in weak and nervously irritable individuals.

Suffocation or gradual disorganization of the articular structure is another of rare complication of rheumatism.

But by far the most dangerous and distressing complication of acute Rheumatism is inflammation of the heart and its membranes which affection often supervenes without the patients knowing it.

Many different causes have been assigned as producing Rheumatism such as cold, Malarious exhalations, indigestion and imperfect assimilation, defective or prevented Utens action, plethora and debility. These may all be predisposing causes. But the symptoms of the disease are very uniform and peculiar in character which would lead us to suppose that there must be some one proximate cause which is the same in all cases of the disease however it may be produced.

For any thing which lowers the vital powers any thing which interferes with the general health may act as a predisposing cause of Rheumatism. Cold and damp are very common exciting causes of the disease, for as long as the skin is acting properly there is no interruption to free cutaneous transpiration, though the poison may be produced it is not allowed to accumulate in the system in sufficient quantity to give rise to an attack of Rheumatism. The poison is a product of faulty assimilation therefore indigestion and...
faulty assimilation are necessary to the production of the virus for if digestion primary and secondary were rightly performed the poison would of course never be generated. Defective Uterine action by disordering the general health and disturbing the system may be the predisposing cause of the disease. Some say that checked perspiration alone will give rise to it without the general health being out of order. But if this were the case there ought to be an immediate return to health on the reestablishment of the respiratory function. We must regard cold and other depressing agencies as merely predisposing and exciting causes of the disease.

The real proximate essential cause of the malady is the presence of some morbid agent in the blood, generated in the system as the result of malnutrition which may be produced by many things which bring about the same state of system required to produce the Rheumatic virus. According to Dr. Pott Lactic acid is the cause of the disease. This has been verified by the experiments of Dr. Richardson in which he injected lactic acid into the Peritoneum of a healthy Cat producing marked Endocarditis of the left cavity of the heart. In a dog he tried the same experiment, Endocarditis again resulting. No joint affection arising in either but in a third experiment not only was there Endocarditis but various joints were affected. The migratory character of the complaint showed itself
as the pains seemed to shift from one joint to another. When then for the characteristic phenomena of the disease are produced thus artificially by lactic acid it is reasonable to suppose that it is the cause of the malady when it is in such abundance during an attack of Rheumatic Fever. But in Germany the same experiments have been tried and failed, which has naturally created a disbelief as to lactic acid being the true cause of the disease. Some maintain that the disease is produced by an excess of fibrin in the blood. But the blood is hyperemic previous to the outbreak of the attack. The excessive acidity of the secretions during an attack of the disease seems to point to lactic acid being present in the blood in abnormal quantity. And when the perspiration is checked in the progress of the disease and the elimination of the acid thus stopped we find the pains and other symptoms of the malady increase which seems to point to this acid as being the irritating matter in the system. Dr. Headland says that the starch taken into the system is transformed into lactic acid which in the healthy system combines with oxygen to form carbonic acid and HO water which are excreted by the lungs but in the state of constitution prior to an attack of rheumatism this transformation does not go on properly so that lactic acid is thus retained in the blood and a paroxysm of Rheumatic Fever is the result.

In judging of the effect of remedies in mitigating and shortening the duration of a disease, we ought to find
out the duration and severity of the symptoms in a case where the malady has been left entirely to nature. But as in practice we cannot in such a disease stand and do nothing, the effect of remedies in this disease must be necessarily rather uncertain. The disease may be shortened in duration and mitigated in severity under the use of certain remedies, while other remedies have no effect whatever on the disease, thus rendering it a matter of difficulty to decide as to the course and duration of an attack unassisted and left to nature alone. I have already adverted to the duration of the disease according to different authors and now adds a few days and an ordinary uncomplicated attack.

Until a few years back the origin and pathology of the disease was unknown and drugs were given and remedies employed while all the while the true cause of the disease was a mystery. But now we have come to what seems a true knowledge of the nature of the disease and are therefore in a better position to treat the malady successfully.

Various remedies have been used with different success. In the hands of one practitioner one remedy seems according to his own statement all powerful, but when the same remedy is tried by another physician it proves utterly powerless. Some seem able to prescribe one remedy well according to the circumstances of each case but fail in getting such good results from the use of other drugs, one remedy succeeds better in the hands of one practitioner than another because the one has
a better knowledge of how to use his drug than the other. For Rheumatic fever many remedies have been proposed, some have been successful in the hands of one practitioner and not in another and is wanted now is not so much remedies as a knowledge of how best to use each of the remedies we already have in order to get the good effects of them all. For some doctors have trusted to one remedy entirely, such as bleeding or Peruvian bark or Bolechiyum, but it is slow generally believed that a judicious combination of remedies according to the exigencies of each particular case is the proper plan of treatment, not taking up one remedy & holding it up as an infallible agent of cure in every case, but using each as the symptoms of the case require.

The remedies now in use or which have been, are, Venection, purgatives, Opium, calomel combined with Opium, Bichroma, Gruidicum Nitrate of Potash, Lemon Juice, Alkalies and their salts.

Sydenham employed Venection largely and trusted alone to it sometimes. As soon as he was called to a case he took 10 oz of blood from his patient next day as much, and if the patient's strength could bear it, bled again in a day or two after and according to the age & condition of the patient, bled once a time. If the patient was too weak to bear such repeated bleedings he ordered a purge to be taken on the morning of every alternate day with an opiate in...
the evening of the same day. What was the result of his practice. That even the robust in some cases did not
recover for a reason or even for years that relapses were frequent and that they were more liable to be
affected with other diseases. Unde non tantum
agri vives pro tempore propter quamvis sed si paulo
furtet natura debilior, alius etiam morbis ad
annos aliquot obnoxius fere redditor.

The bleeding evidently acts by taking away the
support of the disease but at the expense of the
patient's strength. Dr. MeLeod states that in indi-
viduals of average robustness from 12 to 20 oz.
of blood may be abstracted with advantage several
successive times in the course of the first week of
the attack. Now you may extinguish the disease
in some cases by one fell blow as in a case of Dr.
MeLeod's where he says "I ordered the patient to be
largely bled (to 50 ounces) and no medicine was
given internally." In this case the disease seemed
to be literally extinguished for the patient was at
once entirely relieved of his pain and the swelling
rapidly disappeared. But when you extinguish
the disease in this manner, the patient's strength
must suffer severely and perhaps other remedies
in such cases might do as well. The irritability
of the heart is also increased by repeated bleedings
as is proved by Bouillaud who says "Conscience
a peu pres constante soit d'une endocardite, soit
d'une pericardite soit d'une endo-pericardite avec
une violent Rheumatisme akin showing that affection of the heart predominated largely in his practice. Dr. McAdoo who relies almost entirely on bleeding reports pericarditis in nearly one fourth of his cases excluding altogether endocarditis. Dr. Alison said that large and repeated bleedings in the beginning of Rheumatism increase the risk of mitral stenosis to the heart. But in some few cases bleeding may be of use in preparing the system for other remedies. In the young and robust, attacked for the first time and with symptoms unerringly severe bleeding may help to promote secretion and when employed should be kept within four to six to twelve ounces according to the strength of the patient. But we have other remedies which answer quite as well as bleeding in allaying the fever and constitutional disturbance and mitigating the pain so that in general we should avoid using the lanceet as it may do more harm than the temporary relief would do good.

Dr. Shambaugh just introduced the practice of giving balsam fringutines in this disease. The bowels are loaded with dark-coloured un-healthy secretions and it must be well to get rid of them. Besides by this plan of treatment the poison is got rid of by the unusual stimulus to the bowels throughout their whole extent, a greater amount of fluid being poured from the mucous surface of the bowels. By purging, also, the fever
is calmed, and the pain evinced. But this remedy when carried to any great extent reduces the strength of the patient, therefore we must be careful not to go beyond what is requisite for the comfort of the patient. One evacuation in the day will suffice to keep the bowels clear unless the patient has been constipated prior to the outbreak of the attack in which case the intestinal derangement will be much greater, and for the first three or four days two full evacuations in the day will be required to clear the system of matter which should have been got rid of before the attack came on and to get the intestines into a state of healthy secretion. It is desirable to abstain from purging so as to produce five or six motions in the day as this movement necessary increases the pain, accelerates the heart action and exposes the patient to cold when the patient is bathed in perspiration. Besides in bleeding, purging tends by reducing the strength of the patient to protract recovery. From five grains to a couple of grains at night followed by a dose of salts and senna in the morning and this repeated for three or four days according to the state of the evacuations will generally cleanse the bowels and relieve the patient.

As the pain in Rheumatic fever is severe and of long continuance it is of great importance that we should endeavor to relieve this distressing symptom and accordingly opium is given with great benefit.
and is tolerated in very large doses. Dr. Bazenave
of Pau recommended some time ago that opium should
be given in the dose of a grain every hour until the
pain was relieved. Dr. Corrigan of Dublin says that
12 grains in the 24 hours is about the average
quantity required to relieve the patient and keep
up the effect. He begins with one grain and repeats
it at intervals until relief is obtained and then con-
tinues the dose thus reached until the attack
is beginning to subside.

Balsam combined with opium has been tried, but does
not seem to prevent the access of cardiac in-
flammation. Mercury, in small doses producing no harmful
effects, should be thought of in the case of simple acute
rheumatism.

Bolchiciwm, according to Dr. Watson, has great
efficacy in shortening the duration of this malady,
and that when most successful it makes
influence upon the stomach and bowels present.
But according to other practitioners, the best
results are seen to follow the administration of
this drug in small doses producing no appreciable
effect on the system; for it does not seem to be
necessary that the stomach and bowels should be affected
in order to produce the good effects of the drug.
The various bolchici may be given in the dose of
20 minims every four hours or a grain of the
Aqueous extract every 6 hours may be given until some result is obtained. Treated thus the disease is said to vanish in three or four days producing stiffness and bringling though occasionally the same good results follow the drug though the stomach and bowels have not been affected. In proportion as the disease partakes of the character of gout so may you expect good results to follow its administration of polechium, so that when we have a case of genuine fibrous rheumatism we need not be surprised if it fails in working a cure.

Forced perspiration has been tried but the pain is not at all relieved by it and in the genuine sudden form of Rheumatic fever the perspiration is quite profuse enough without any assistance in the way of drugs or hot bottles or blankets which used to be the practice formerly. If the perspiration is not going on properly then the remedy may be of some use stimulating the function of the skin.

Dr. Haygarth had a strange belief in the efficacy of bark in Rheumatism. He began to give it between the 50th and 60th day of the attack in doses of from 10 to 30 grains of the powder or from an ounce and a half to 2 ounces of the decoction 3 or 4 times a day. He says due evacuations must be produced before the bark is administered. "For many years," he remarks "I have been thoroughly
convinced that the Peruvian bark has a much more powerful effect in the rheumatic than in any other fever and he adds that it does not cure an ague so certainly and so quickly. But when given before the pulse has gone down and while the tongue is still furred Dr. Fullin says it does more mischief than good for the fever and pains are increased by its being given instead of being diminished. It is useful however after a bad attack as a tonic and in cachectic states of the constitution in order to restore healthy assimilation.

It is not to be used as a remedy for the disorder in the acute stage of the attack but only after the violent symptoms have passed off and the patient weak and exhausted. Now as a tonic it is good. And as showing this let me refer to a treatise in the Dublin Med. Journal for 1844 Vol 26 by Mr. John O’Shea who says "bark is called for in those cases when there is complete atony of the cutaneous vessels so that the skin is unfeelingly pouring out acid colliquative sweats. The pulse is small and indicating debility. It should be used to give tone to the system after the disease has passed and the patient’s strength reduced. Feeding something to put it again into the system.

Quinine has been greatly praised by some occasionally it answers very well. But it has been observed to do most good when hanging is
produced.

Detergent juice from its simplicity and novelty as a remedy has been tried extensively, but it has lost the confidence of practitioners in it as a cure as it is uncertain in its action and I have myself seen great depression caused by it when given for subacute rheumatism in a lady about 60 years of age, without any relief to the pain or constitutional disturbance, though the dose was only half an ounce 3 times a day and Dr. Owen Roebuck prescribes one or 2 ounces doses daily. It acts according to him by the conversion of lithic acid into urea and carbonic acid.

Nitrate of Potash in doses of from a few grains to two or even four drachms three or four times a day has been used a good deal in this disease, but according to Dr. Bulloch without either benefit or harm to the patient by the relief of his pain or shortening the duration of the attack but Dr. Basham says it relieves the pain while Henry Bennett says that it diminishes the force of the heart's action.

Dr. Watson highly approves of the use of Alkalies and their salts. They neutralize the acids in the system thus the fever and eliminate the poison by the kidneys being in general good auguries. They increase the solubility of the fibrin of the blood and as lessen the risk of the heart being coming implicated for Dr. Garrod says that in
of cases so treated no instance occurred in which affection of the heart appeared after the patient had been 48 hours under the influence of the Bicarbonate of Potash administered in doses of two cemals repeated every two hours.

Now as this this arises from a poison in the blood there are two ways in which we may assist nature in curing the disease or getting rid of it. Nature can help the system to eliminate the poison and we can neutralize the poison already formed in the blood thereby depriving it of its power to hurt the system. The former seems the same acid from the acidity of the system during an attack of the disease. Alkalies therefore ought chemically to neutralize the poison and destroy its power of irritating the system while by virtue of their purgative action they will help also to eliminate the poison from the blood by the kidneys. But in administering them we should ascertain that the kidneys of the patient are healthy.

Purgatives when practiced to a small amount in fit subjects for it will relieve the system assisting the liver in its function of preparing the way for other drugs. Purgatives will clean out the bowels and also stimulate the mucous membrane to mucilaginous secretions so that a great amount of fluid will be forced out and to the elimination of the poison be assisted. Bowels will greatly assist the purgatives in their action on the bowels as well as which is its chief duty.
cleanse the liver.

Opium by producing sweating & relieving the pain & relaxing the system is of inestimable benefit in the conducting of the disease to a safe termination.

Warm drinks to keep up the sweating may occasionally be given.

Slow diet should be enjoined at first but when the patient's strength seems reduced the case is frustrated. Beef tea, honey should be given.

Milk or lime water has been recommended, the lime water assisting to neutralize the acid in the system.

As to local remedies, fomenting the parts affected with a mixed alkaline & oxalic solution proves very powerful in allaying the pain of rheumatic inflammation.

After the patient's health has been completely recovered, we should guard against future attacks by strengthening the system by all means in our power by giving tonics and regulating the quality & amount of his diet, so that his system may be in the best possible position for preventing the production of the rheumatic fever.

I have been obliged to cut short and abridge the last part of my paper as I have been unavoidably engaged otherwise for the last two days when I had hoped to have finished my paper early.
The authors I have consulted have been the following:

- Dr. Haygarth's works
- Sydenham's works
- Dr. Fuller on Rheumatism
- Dr. M'Leod
- Dr. Watson
- Bullein's works

John Pringle