AN INAUGURAL DISSERTATION
ON
Rheumatic State of Fever

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BY
Harvey Threadgill
OF
Shiloh, Alabama

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Rheumatic State of Fever

The rheumatic state of fever belongs to that class of fevers that is attended with local delirium. It is peculiar to climates where there are sudden changes of weather, as from heat to cold, and from moisture to dryness. It is seldom noticed by writers upon diseases of climates that are uniformly warm or cold. It occurs most frequently in autumn and spring, after very warm or cold seasons.

It is a common disease among soldiers, and labourers, who, from their occupation are continually exposed to the vicissitudes of the weather. Hard drinkers and persons of a robust and plethoric habit of body, with a volatile disposition, seldom escape it; and it sometimes happens that persons of a weak, relaxed, and delicate constitution are affected with it. It generally occurs from the age of puberty to thirty five or forty. It most commonly attacks the large joints, muscles, and tendons, though the viscera themselves are not exempted from its ravages. Two stages of this disease have
been noticed by writers of all ages, viz. the Acute
and Chronic. The Acute form
The paroxysm of Acute Rheumatism is generally
preceded by chills. 

The tongue appears white, and
the urine, which at the commencement was high
Coloured, and Clear. Towards the middle or latter
end of the paroxysm, deposits a lactitious sedi-
ment. The pulse is hard, full, & tense. The vessels
of the skin appear to be spasmodically, affected
from excess of action, hence the stoppage of perspi-
ration and anmoist of skin. The pain affects the
hip, joint, bones, ankles, wrists & muscles, the latter
of which have it much increased upon the least
motion or pressure. The upper and lower extremities
are affected both alike, but the head is less often
affected than any other part of the body. There is
a redness and swelling round the part affected
which sometimes approaches to the nature of
empysema, and is very painful to the touch.
The disease sometimes will be marked with a
recurrence or exacerbation of the febrile symptoms. The pains will become more general and they will prove more difficult of cure. The fever most commonly comes on before the pains, but the latter sometimes precede the former two or three days. The pains seldom go off before the fever has abated, and now and then they go off together. The patient does not enjoy much rest at night. In this stage of rheumatism the pains are in general do not remain stationary or affect one part more than another. The pains commonly pursue the course of the muscles, flying from one joint to another. It is a remarkable characteristic of this disease that it seldom terminates fatally. In a few instances it has had that termination when the trachea has been the seat of the disease. Effusion does not in general take place, but instead of which effusions are produced to the great annoyance of the joint. Scarcely sometimes occurs at the commencement of a paroxysm but does not prove critical or afford any relief. The disease frequently continues for two or three
weeks. The alteration produced in the blood is similar to that which occurs in pleurisy. Chronic Rheumatism is that affection of the joints and muscles which consists in a very obstinate pain, accompanied with stiffness and rigidity of the parts. In general, it is attended with scarcely any febrile symptoms and very little or no external signs of inflammation. The disease lies deep, affecting those joints that are surrounded with large muscles, that are continually in motion, as those of the hip and knee. The pain is more stationary in this stage than the acute, being little disposed to change its situation or to affect more than one or two joints at the same time. Effusions are often produced in the chronic than the other stages of the disease, which form chalky deposits greatly impeding the motion of the joints. The pulse approaches to that of the Syphilis or smallpox, and quick without tension. The pains here are not increased by the heat of the bed or clothes nor are they so liable to a recurrence or translation as in the acute. Elderly persons of those
of phlegmatic temperament: are the proper subjects of chronic rheumatism. The parts occupied by the disease are not near so painful as in acute, but rather a deficiency of sensibility occurs. The natural functions are less often affected by it than by the acute. Diagnosis: It has been a common practice among writers of all ages to specify such symptoms of a disease as were supposed to be peculiar to itself, and which would characterize it from all others. But so variable have disease become in their nature and so liable are they to intermingle symptoms that to draw such a line of distinction as would serve as an unerring guide is a task unsurmountable but by few if not altogether impracticable. Indeed, performances of this nature are now known to be of little importance since it is the state of the system and not the names of the diseases that are to guide us in our prescriptions. However, in compliance with custom, I shall endeavor to enumerate such symptoms as have been noticed by attendants upon this disease and which might serve to distinguish it from others.
Rheumatism is more allied to gout than any other complaint. Indeed so great is their similarity that many have been led into error respecting the two diseases. They however differ in a few particulars. First, as it respects their degree of force, Rheumatism in general is much more mild in its attacks, is of a shorter duration, returns less frequently, and is much more easy to subdue than gout. It seldom depends upon a hereditary predisposition and is generally brought on by external causes, but gout is the frequent offspring of a hereditary predisposition which arises from internal causes not altogether obvious.

The gout with a few exceptions never appears until after middle age to attack the smaller joints and viscera. Rheumatism most commonly appears before that period, to attack the smaller joints and viscera, but seldom. The pain in Rheumatism wanders more about from one joint to another, affecting two or three at a time; but the pain in gout generally remains fixed and seldom occupies more than one joint at a time. The part affected by gout is more susceptible of impressions than
that affected by rheumatism. The concomitance of gout are likewise different from those of rheumatism, as when it attacks the stomach, vomiting, indigestion, flatulence attend, which seldom or never accompany the latter disease. When rheumatism as it frequently does, attacks the os sacrum and neighbouring parts, symptoms will occur similar to those of a paroxysm of nephritis, but may be distinguished from it by the absence of vomiting. The liability of the pain to increase upon the least exertion or movement, it is with difficulty, that rheumatic affections of the muscles of the chest can be distinguished from a common pleurisy on account of that close connection which exists between their symptoms. However from the patients having formerly suffered by rheumatism to from the inflammatory diathesis being of very long continuance we might then with propriety judge of the nature of the disease. Rheumatic affections of the bowels may be distinguished from enteritis by the pain being left of long continuance of from the non-occurrence of vomiting. Bloody
Stools never occur in rheumatic affections of the bowels. Nor do they prove infectious, which distinguish them from dysentery. Causes

I shall give none but the exciting causes. It must be evident in order that disease should be produced that certain causes must interfere to excite the system into action. These substances are called exciting causes. Many instances have been recorded of bodies remaining in a state of predisposition for months and even years, without having the least disease produced herein. Indeed we need only refer to the daily occurrence of facts to support this opinion. How often do we not see persons after labouring under debility for a length of time finally recover from that state without being the least diseased owing to the exciting cause being extirpated.

From this fact we learn the possibility of preventing disease in its forming state.

And the prophylaxis consists only in regulating at that critical period the diet dress of our patient to the state of the system.
These directions, when properly followed have been attended with the happy effects of preventing disease, in wearing away the predisposition to it, by exciting a regular and healthful action in the system. That disproportionate stimuli acting on a part taking a natural accumulation of excitability should produce such commotions in the body is no new law of the animal economy. We see it daily illustrated in the common diseases of the animal system. The system then being in a state of debility and its excitability greatly accumulated, we may easily foresee what would happen from the exposure to the heat of the sun or that of a stove room: disease will inevitably be the result. Heat applied either generally or partially to the body after it has been exposed to the opposition of cold frequently has this effect. The inordinate use of spirituous liquors, particularly at those times when the system has been debilitated by the dampness of the weather, proves a prolific source of this disease. Exercise continued so long as to produce fatigue likewise

Strains, strains so frequently induce it—

Treatment. From the history of the symptoms & other concomitant circumstances of rheumatism, it evidently appears to be of inflammatory nature. Our indications of cure must be. 1st, to reduce the excessive excitement and 2nd, to restore its equilibrium.

The remedies that are found most useful for the accomplishment of these two ends are:

1st. bleeding 2nd. Cold 3rd. Laxatives
4th. purges, and 5th. blister. On each of these I shall make a few remarks. But before proceeding farther it may be necessary to premise that on the employment of these remedies we must be regulated entirely by the violence of the symptoms and duration of the disease; for when it is recent and the pains not very great, and no considerable degree of fever attending, mild and less powerful medicines will answer in subduing it: such as mild purgatives & diaphoretics. It is at this period of the disease in which frictions are found to be of such advantage; its good
The effects will always be more certain when promised by proper evacuations. But when as it frequently happens, the febrile symptoms are very high, the pulse hard and tense, the pains almost inexpressible, flying from one joint to another and are likely to continue for any length of time, we must then have recourse to more powerful evacuants as blood letting cathartics &c. The propriety of withholding stimulating aliments and such other substances as might aggravate the disease or in any measure tend to counteract our prescriptions, must be obvious to every practitioner in medicine. The diet therefore of our patient must be restricted. All animal food should be forbidden. Likewise all that are of a stimulating nature and hard of digestion. Barley broth, milk &c. should be substituted in their room. All spirits or liquors should be particularly avoided. The patient should be directed to take plentifully of milk, drinks slightly acid, such as apple water &c. Blood
Letting is the remedy to be most depended upon in this disease as it abstracts one of its exciting causes, namely, the stimulus of the blood from the very seat of the disease, and quickly reduces the excess of morbid excitement in the system. Its use should be regulated according to the state of the symptoms as indicated by the pulse, a most correct index. Bleeding from the arm may not be sufficient when this is the case. Cupping and leeches may be applied to the part most inflamed. Cold is the next remedy that claims our attention. It is the auxiliary to blood letting and when used with discretion and in conjunction with that remedy facilitates very much the cure of this disease. It may with propriety be considered as an evacuant as it acts to absorb that redundancy of heat generated in the system by the excess of arterial action which when suffered to remain tends greatly to aggrava
ate the disease. It is to the immortal Sydenham that we are indebted for the introduction of this valuable remedy into practice. The first used it in fevers of the highest inflammatory grade, and from the uniform success attending it, later physicians have extended its use to diseases of milder grade, with the same good effects. The forms in which it is generally used are cold bath or ice. Poulticed ice in bladders should be applied to the inflamed part of the body. Clothes dipped in cold water with the addition of vinegar may likewise be used. It may be proper to observe here that unless the application of cold be continued for a sufficient length of time, that is until the febrile symptoms are in a measure subdued, it will be often attended with a contrary effect. That of increasing the inflammatory diathesis of the system by a temporary suspension of the heat and increasing its excitability, on which
Stimuli will act with a double force. Stenophories must claim our attention. They have been used in most inflammatory diseases with success and are by some physicians preferred to the lancet. This operation is however more harsh and thus affects more debilitating to the system and they frequently fail in affording relief in consequence of which the disease becomes aggravated. They are best adapted to the milder form of this disease. The very best diaphoretics are, in my opinion, dry powders & tincture of quinaeum.

In the choice of cathartics we must be regulated by the state of the system. If no great degree of constipation attend, the milder sort are to be used, as cream of tartar, Glauber salts, etc. But if the patient labours under much constipation, the more powerful kind are to be preferred, as rhubarb, jalap & calomel. Blisters constitute one of the most valuable articles of the
Materia Medica. But many alarming symptoms sometimes result from their incorrect application, such as Strangury, bloody urine, etc., all of which might be avoided by paying strict attention to the substitution of the inflammatory symptoms before recourse is had to them. They are not only attended with the disadvantage arising from depletion, but likewise that of exciting abnormal action, by which means the pains of the joints are greatly lessened. Their application should not be suffered to continue longer than is really necessary to produce the desired effect, which in general will require eight or ten hours. They are found to be particularly effective in the chronic stage of rheumatism.