IS SALICYLIC ACID A SPECIFIC FOR ACUTE RHEUMATISM?

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UNDER this heading Dr. Latham, in the JOURNAL for December 10th, made some suggestive observations on the treatment of acute rheumatism. Before offering a reply to his question, it seems advisable to consider, in the first instance, the true clinical position of the disease under consideration. There appear to be two groups of cases which have hitherto been massed together as acute rheumatism or rheumatic fever; and these terms have been regarded as synonymous, although their literal interpretation would appear to indicate variety of condition. The opinion has certainly been forced upon me from clinical observation that cases should primarily be divided into two main varieties:

1. Those to be termed rheumatic fever, where fever is the predominant condition, and where affection of joints is of less intensity and quite disproportionate to the degree of fever, the disease tending to affect muscular tissue rather than sero-fibrous tissues, and the character of cardiac complications being signified by the occurrence of myocarditis. This disease should be treated as a fever, and probably guided to its termination. Salicin, quinine, and salicylic acid, will have their value as antipyretics. The class of vascular sedatives, and remote antacid diaphoretics, will have their value as febrifuges; but the class of so-called "specific" remedies, when used as such, have probably failed.

2. Those to be properly termed acute rheumatism; or, more significantly, polyarthritis acuta, where shifting affection of the joints is the predominant symptom, and the sthenic inflammatory fever usually corresponds to the severity and extent of the local symptoms. Here sero-fibrous tissues are involved: the metastasis of joint-lesion appears to point to disordered innervation, whether this be indirectly the result of neurilemma becoming involved or not; and the complications, moreover, tend to affection of the sero-fibrous structures of the heart or to endocarditis and pericarditis. It is in this disease that the class of so-called specifics have from time to time received a degree of acceptance; and, it is worthy of note, that the majority of these specific remedies should be properly classified as powerful nerve tonics. The treatment which has proved most successful in my hands in these cases, is the application of blisters above the affected joints, which serves the double purpose of allaying pain and rendering the urine alkaline; and the administration at the same time of propylamine, which, as a powerful alkaline remedy, controls the disease. So convinced, indeed, have I been of the effect of propylamine alone (without the use of blisters) in relieving the pain of joints and lessening fever, that a new remedy, such as salicylic acid, with its remedial effect as an antipyretic, has not fully commended itself. In the few cases also in which I have used it, the resulting head-symptoms (whether from the impurity of the drug or not, as Dr. Latham suggests) have certainly been alarming. From the experience of others, however, salicylic acid (I am not speaking of salicylate of soda, which is also a remote antacid) has proved a remedy of great power; and the best thing that at present can be wished for it is that it will not yet be relegated to the class of "specifics" in acute rheumatism; for if so, it will probably follow suit with propylamine, blisters, tincture of perchloride of iron, quinine, alkalies and lemon-juice—all have had their day as so-called specifics, and each in its turn has given way to its more novel and more popular successor. The reason of this appears to be that its true action has not been sought in its acceptance as a "specific"; and that clinical investigation has tended, in the use of the thermometer as a guide, to lose sight of more general observations, such as: the character of the fever, is it sthenic or asthenic?—the temperament of the individual, and whether there be plethora or anæmia—and, lastly, the special clinical characters of the disease as to the development or otherwise of what are termed "hæmic" murmurs (which are common), and the pathological definition of complications that may arise. When it is said that salicylic acid is a "specific" in acute rheumatism, may it not very reasonably be asked what is meant pathologically and therapeutically by the use of this term "specific"? Taking Binz as an authority, we find that internally the effects of salicylic acid are stated to closely resemble those of quinine, even to the production of ringing in the ears and transient deafness. Large doses alone act as a direct poison on the heart and respiratory organs. It acts as a poison on many forms of protoplasm, by considerably reducing their power to absorb oxygen. Even in small doses

it checks a variety of processes which depend on decomposition; but, like quinine, it does not interfere with the normal ferments of the organism itself. It causes a marked reduction of temperature in many febrile diseases; but the fall of temperature is independent of any alteration in the pulse or respiration, and may occur without any perceptible deviation of either from its previous state. Its use is in the most various febrile conditions, and in internal conditions accompanied by decomposition, such as gangrene of the lungs, etc. In some febrile states, such as phthisis and erysipelas, and especially acute rheumatism, it has a better effect than quinine, while in malarial poisoning it is inferior to it.

Now, in speaking of salicylic acid as a specific, is it contended that, in addition to the results following its marked antipyretic action, it has also an action peculiar to itself in controlling acute inflammation of sero-fibrous structures? or, in other words, is it curative of a condition which may be described as polyarthritis acuta? If salicylic acid is primarily an antipyretic only, and the most powerful one we possess, then Niemeyer, in his observations on the use of quinia, appears to have prophetically shadowed forth the true position of salicylic acid. "Quinine is no more a specific in acute articular rheumatism than in pneumonia, typhus, and many other diseases in which it is nevertheless an important remedy. But it is one of the most powerful antipyretics, and it should be used when the fever is high. After the experiments of Weber and Billroth, there can scarcely be any doubt that the quality of the blood in fever patients decidedly favours inflammatory disturbances of nutrition. If this be so, an antipyretic treatment has also an antiphlogistic action; and quinine, as well as other antipyretic remedies, would answer, not only the symptomatic indications, but also the indications from the disease, particularly in acute rheumatism, where, while the fever continues, new joints are continually becoming affected." Can we say any more than this of salicylic acid?

IS NOT SALICYLIC ACID A SPECIFIC FOR ACUTE RHEUMATISM?

By WILLIAM STRANGE, M.D.,

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DR. LATHAM asks this question in the JOURNAL of the 10th instant. At first, I was inclined to answer, Yes, it is. Second thoughts, however, which are sometimes best, have induced me to put it in the interrogatively affirmative, leaving others, if any feel able, to make the simple affirmative reply to Dr. Latham's question.

But a satisfactory reply can hardly be given, until it is agreed what is meant by a specific remedy. Quinine for ague, mercury and iodide of potassium for syphilis, are, I suppose, regarded as specifics; and if this be the sense in which Dr. Latham puts his question, I, for one, should reply in the affirmative. But if salicylic acid and its compounds only cure rheumatism by sweating and relieving tension, then are they no more specifics than are potash, opium, and the neutral salts, which relieve by the same means.

It may be asked, Wherein does a specific remedy differ from an antidote? In Hooper's *Medical Dictionary*, we find a specific defined as "an infallible remedy for the cure of a disease"; whilst antidote is said to be a "remedy". It is generally thought that quinine cures ague by attacking, in some way not very well understood, the *materies morbi* in the blood—possibly by preventing the periodical reproduction of microzymes; and that mercury and iodide of potassium act by neutralising, in some way, the syphilitic primary virus in the one case, and by attacking the secondary products found between the virus and the tissues in the other. Wherein do these processes, supposing them to take place, differ from the action of an antidote? An alkali meets a mineral acid poison in the stomach, and neutralises it chemically; other substances meet the vegetable alkaloid poisons in the blood, and neutralise them—*e.g.*, opium and belladonna—vitality. A truly specific remedy, then, *i.e.*, that which cures the disease infallibly, must be of the nature of an antidote, meeting the diathetic poison in the blood, as others do chemical poisons in the stomach, and neutralising its operation.

Now, that salicine, and especially its compound the salicylate of soda, are entitled to this high place in positive therapeutics, I am quite convinced, and I think most hospital physicians will agree with me in that opinion. We give twenty grains, more or less, of the salicylate every three or four hours in a case of acute articular rheumatism; and in from three to five days, occasionally prolonged to nine, the temperature, which ranged from 103° to 106°, falls to nearly or quite the normal point; whilst the pain, and a great part of the swelling, disappear at the same time. Quinine can do no more than this in ague,