

repeated. The patient should receive not less than two drachms every twenty-four hours, and considerably more may be required. I have found that salicylic acid is more effective if given in solution or contemporaneously with an excess of alkali, than if administered in powder by itself. If kept for a few hours in solution with sodium bicarbonate in excess, the solution becomes brownish or greenish-brown, and emits an odour of wintergreen. Take it all in all, the most satisfactory procedure is to give wafers containing the salicylic acid, and alternate with an effervescing draught of an alkaline carbonate—the official effervescing powder answers the purpose. The amount of relief given by this remedy in many cases, is amazing, and in a few hours, a cure being effected not unfrequently in three or four days. When good is being accomplished by it, the evidence is quickly afforded in relief to pain and decline of temperature. If, therefore, after several days—three or four—persistent and efficient administration of salicylic acid, the signs of improvement are wanting, it is probable that nothing will be accomplished by its continued use. If the stomach will not bear it, or if the considerable doses necessary depress the action of the heart, or cause great irregularity in the pulsations, it must be discontinued.

Notwithstanding the importance of these remedies, or methods of treatment, there are accessories scarcely inferior in the influence which they exert over the progress of the case. The diet must be carefully regulated. Solid food of any kind seems to be hurtful, and there is usually great repugnance to it. Milk, and beef, mutton, or chicken broth, are the chief components of the diet. Large draughts of milk are useful by maintaining free action of the kidneys. Coffee and tea may be allowed, but wine, beer, and spirits are highly injurious.

Shall any attention be given to the joints? Experience does not justify the local treatment of the rheumatic inflammation. The curvative effects of blisters are not due to the notion at one time entertained, of the withdrawal of a morbid material from the affected parts, or to the counter-irritant action, but to their systemic effects in increasing the alkalinity of the blood, and lessening the acidity of the urine, and their power to relieve pain. Wrapping the joints in cotton is comforting to the patient, but it is questionable practice, as the heat is retained, and the temperature of the joints kept above that of the neighboring parts. The application of alkaline lotions, at one time much used, owing to the theoretical notions then entertained, is now rarely employed. Painting with iodine tincture, does not influence the course of the case in any way. To maintain immobility of the affected joints, is a measure of the highest utility. Motion increases the pain and swelling, which react in turn on the systemic

state, and conversely, an absolutely quiescent state of the joints, diminishes pain, and lessens fever. To secure the necessary quietude has been attempted by mechanical means—by starch or plaster bandages; but there are many joints so situated that this method, if desirable, would be impracticable. In fact, the desired immobility can be secured only by moral and medicinal means. The necessity for quiet—for absolute quiet—should be impressed on the patient, but moral suasion must be aided by means to quiet pain and restlessness. It is the sedative influence of the bromides on the centres of conscious impressions, and on the reflex and motor centres, which gives them importance as remedies in acute rheumatism, and by some of our best authorities they are assigned the highest place.

Relief to pain and restlessness is best afforded by the agents which exert a curative influence, but if pain persists relief must be given in some other way—by anodynes. If the bromides are active enough to allay pain, to bring sleep, and to quiet the restlessness, they are to be preferred; but it will generally be found, I think, that they do not possess sufficient anodyne power. Morphia or Dover's powder are usually resorted to, but the relief which they afford is at the expense of a protracted convalescence. By checking elimination, opium retards improvement. There is an agent which happens to have a decided effect in relieving pain, whilst at the same time it promotes elimination; that is, atropia, which, for this purpose, was first used and recommended by Dr. Harley. It should be administered hypodermically and in the neighborhood of the affected joints. The dose for each injection need rarely exceed the  $\frac{1}{4}$  grain a day.

I have probably occupied sufficient time in giving this summary of the treatment of rheumatism, yet I ought to say something of important complications. It is by no means an unusual circumstance to have endo- or exocardial inflammations occur—in, probably, one third of all the cases. To combat it, there are three remedies of chief value—morphia, ammonia, and digitalis. As soon as the fact of the cardiac complication having arisen is known, the carbonate of ammonia in solution of the acetate (5 grains to a tablespoonful), should be freely given, with the object of securing prompt solution of the fibrinous exudation or deposited fibrin. To check the inflammatory process, and lessen the work of the heart, morphia and digitalis are prescribed. The morphia is most efficient when administered hypodermically, and the digitalis when in the form of infusion. As there is no therapeutical incompatibility, these agents may be given contemporaneously. When the acute symptoms subside, to relieve the immediate and prevent the ulterior bad effects of the inflammation, the