

97 deg. F., but, unfortunately, with symptoms of collapse, rigors, and a feeble pulse, and the thallin had to be discontinued.

In another cavity case one grain was administered every two hours, and the temperature was lowered in eight or ten minutes. The medicine was continued in one and one-half grain doses three times a day, but here again collapse followed, and the drug had to be omitted. For rapidity of cooling action thallin, even in small doses, surpasses all other drugs, but its effects are nearly as alarming as those produced by pyrodine, which I strongly recommend all members to have nothing to do with.

*Antifebrin* or *phenylacetamide* has given me, on the whole, good results in phtthisical pyrexia. Its action is rapid, and the lowering of the temperature appears due to diaphoresis, which is sometimes long continued and may be exhausting. The great advantage of antifebrin over antipyrin and other antipyretic coal tar derivatives are (1) the small dose (five to seven grains dissolved in warm water, it being insoluble in cold), and (2) the few doses required in the twenty-four hours—as a rule, two doses a day, given at noon and 4 p. m., will suffice to keep the temperature within moderate bounds; (3) that it can be easily suited by the patient to his or her own requirements. A record of the temperature is kept, and if the chart rises above 100 deg. F. or 101 deg. F. a powder is at once taken, but if the record remains below this it is omitted. Much has been said about the danger of antifebrin in causing collapse of the circulation; all I can say is that I have administered it in the above doses to hundreds of consumptives without the slightest evil result; and I regard it, on the whole, as one of the best antipyretics available for the pyrexia of phtthisis. It speedily lowers the temperature 2 or 3 deg. F., which effect remains as long as the antifebrin is taken.

*Phenacetin* has been found useful in some few cases where antifebrin failed. The dose is smaller and the sweating not so profuse. I once tried hypodermic injections of *carbolic acid* of strength varying from 1 in 30 to 1 in 50, in accordance with the advice of M. Leon Petit, of Paris, who informed me that the reduction of phtthisical pyrexia by these means was complete. Two female patients, with well-marked third stage pyrexia, were selected, and 15 minims of a 5 per cent. solution of carbolic acid were injected before the fever rise every day for a fortnight, the dose being gradually increased to 30 minims. The result was purely negatives, but the patients did not complain of the proceeding.

In another case the hypodermic injection of *guaiacol* was performed on a hospital patient of mine by a German physician, who reported most satisfactory results from this treatment in his own country. The dose was 18 minims of an alcoholic solution, and it was injected under the

skin of the thigh, the temperature being then 101.8 degs. The patient complained of a slight burning pain over the puncture spot, which soon passed off. Half an hour later she felt very hot and perspired profusely, the temperature falling to 97.4 deg. Two hours later symptoms of collapse came on, and for two hours the temperature was so low that the thermometer failed to register it. By 10.30 p. m., under stimulating measures, the patient had recovered, and the temperature rose first to 96.4 deg., and by 12.30 to 101.4 deg. I need hardly to say the experiment was not of a character to encourage or justify repetition.

*Cold Applications.*—Some eighteen years ago I published three cases of pyrexia of phtthisis treated by cold baths, where consumptives with high fever were immersed in water at 90 deg. F., which was rapidly cooled to 60 deg. F. The reduction in all cases was very decided, and in one case amounted to 6 deg. In all three cases the temperature rose again, but in two of them the bath seemed to be the starting points of improvement in appetite and strength, breathing, and physical signs, and moreover, in these two, the records were never so high after the bath, and the pyrexia gradually subsided. The third case was an advanced one, with double cavities, and the temperature was lowered, but not permanently. In neither of the patients was any congestion of the lungs or bronchial catarrh induced by the baths.

However, cold baths are at best a clumsy arrangement, and quite inadmissible in many instances, and so I next tried tepid sponging of the body in several cases, with great refreshment to the patient. The ice pack was also tested in some instances of severe pyrexia, and found effective for reduction of temperature, though difficult of frequent application. Finally at the suggestion of the late Dr. Wilson Fox, I tried Chapman's spinal ice bags, arranging that the patient, should wear one of these for a few hours each day whenever the temperature rose above 100 degs. F. This reduced the temperature decidedly for the time, and added greatly to the patient's comfort.

A natural question arises here: Is it advisable to reduce the pyrexia of phtthisis at all? We do not thereby stop the tuberculous process; and as regards the wasting, I have shown elsewhere that pyrexia in phtthisis is compatible with gain of weight, provided the diet be of sufficiently abundant and nutritive character. In most cases the reduction of temperature is attended with a certain degree of comfort to the patient. But even to this statement there are exceptions, for occasionally patients, when the pyrexia is reduced by antifebrin or antipyrin, experience such uncomfortable sensations—chiefly of oppression—that they prefer the high fever to the effect of the antipyretic.

Two agencies which sometimes prove power