

similar case. The patient at the time of the first convulsion had a pulse of 80 and a normal temperature. There were four subsequent convulsions about two hours apart, the temperature rising higher after each fit, until the last, when it registered 109.4 Fahrenheit. I have usually observed a marked rise of temperature after a puerperal convulsion, and am unprepared to offer an entirely satisfactory explanation. Of course, other causes than nerve stimulation may contribute to the rise of temperature in these cases, as increased retrograde metamorphosis of tissue, or from the sudden accumulation of heat in the body from arrest of those synthetical changes that are involved in the elevation of protoplasm into organized tissue, changes which we know require the conversion of heat into a different form of energy, and in which form it remains stored until released by metabolism later in the cycle, and again assumes the form of heat. I have thought it likely that all of these thermic factors, acting in unison and with unusual potency, cause a sudden increase of heat, and that the thermotoxic mechanism fails to respond in a prompt and normal way so as to bring about an equally prompt and active thermolysis, or, if I may so express it, the thermotoxic apparatus is caught napping, and before it can open the flood-gates of heat loss the temperature rises.

While it is difficult to over-estimate the value of the thermometer in clinical work, it should not be overlooked that what it reveals is not always a true criterion of the mildness or of the gravity of the disease under treatment. Experience proves that many febrile diseases run a favourable course when a high temperature is registered throughout, while others, with only a moderate rise, baffle all our efforts and prove fatal in spite of all we can do. Paradoxical as it may seem, there may be rise of temperature without fever, and there may be fever without rise of temperature. It is true that rise of temperature is one of the most constant symptoms of fever, but it will be readily seen that inadequate discharge of heat from the body through any interference with the apparatus that subserves this function, while at the same time there is only the normal production of heat going on, will cause a rise of temperature, as indicated by the thermometer, and yet it would be incorrect to designate this as fever, because the changes in the tissues essential

to the febrile state, such as increased production of urea and carbonic acid, are not taking place. Again, there may be catabolic changes of so active a character going on as would be sufficient, under ordinary circumstances, to produce a rise of temperature: but, at the same time, the factors that regulate heat discharge may be so active as to more than balance the increased production, and a normal or even a sub-normal temperature would result. These considerations should always be appreciated in adopting therapeutical measures in febrile diseases. Rapid wasting, as indicated by the increased amount of effete material discharged by the emunctories, offers a clear indication for maintaining these emunctories in an active condition, and at the same time, for adopting measures to sustain the digestive and assimilating organs, and for supplying nourishment suitable in quality and quantity to the changed conditions of nutrition. Antipyretics should be regulated in the same judicious manner, always endeavouring to ascertain and to bear in mind those changes upon which thermic phenomena depend. The last few years have placed within our reach a great number of antipyretic agents, but I am convinced that as such all these drugs might be dispensed with and little or no disadvantage be felt. They reduce the temperature, but they depress the patient to an extent that should preclude their use in any protracted case in which frequent repetition would be necessary to maintain a safe temperature. Their use in such cases becomes less imperative while we have such a safe, potent and unfailing remedy as the bath at our disposal. To me it is inexplicable that a remedy that has been known for ages, that possesses so many advantages and so few disadvantages, that has such overwhelming testimony in its favour, should still be excluded from the armamentarium of so many medical men, or, if admitted occasionally, used in such an unscientific way as to do little more than to lead to disappointment and bring a sovereign remedy into disrepute.

Brand has given full and complete rules for the use of the cold bath in fever, and this plan has been adopted in many hospitals, and by the most progressive physicians everywhere in the treatment of typhoid fever. The evidence is incontestable that the mortality from this disease has been reduced from about twenty-six per cent. to five or