

in health the temperature varies somewhat from hour to hour, and in the febrile condition, as we should naturally expect, the temperature equilibrium is more easily disturbed, so that the variations from hour to hour should be greater than in health, and they are even so, being more marked in children, but even in adults the change may be as much as 2° .

This section of a chart (Fig. 1) illustrates this well. It is from a case of enteric fever in a child, and the observations were made as nearly as possible every two hours, when the child was awake. The first four records were made at 2.30, 7, 9, and 11 a.m.; the next four at 1, 3.40, 6, and 9.30 p.m.; the next at 2.15, 7, 9.30, and 11.30 a.m.; and the last three at 1.30, 4, and 6.30 p.m.

The observations of one day may be made when there is a decided exacerbation of temperature, and next day during a remission, indicating a lower temperature than on the first day; whereas, had the temperature been taken during an exacerbation the second day, it might have been found considerably higher than on the first day, and indicate no improvement in the patient. We have all frequently met with illustrations of the truth of this; to-day the patient seems better, but the chart reports him worse, or it may indicate an improvement that we cannot find grounds for accepting. To ensure a correct temperature record it is necessary, therefore, that several observations be made daily; it is desirable in all serious cases that such should be done in order to protect ourselves against a misleading record.

(3) As to the duration of the febrile movement, there are many departures from the ordinary, which is considered to be from twenty-one to twenty-eight days. In the first place, in some—in my own opinion, in many—the fever aborts after a duration of from seven to ten days, or even less. On a former occasion* I described some such undoubted cases. The temperature elevation in such cases is usually moderate, but may be high; it is rapidly attained, usually in two or three days, and terminates, as a rule, by a pseudo-crisis. We meet with cases that are clearly abortive in households with one or more well-developed ones. There seems to be no more ground for denying the occurrence of such cases than of

abortive attacks of any of the acute eruptive fevers. The changes in the bowel in such cases would probably not extend beyond congestion of the Peyerian patches in the lower part of the ileum, with, in some, slight ulcerations of the patches on, and in close proximity to, the ileo-cæcal valve. The opportunity for examination in such cases is so rare that there can be no certainty as to the bowel changes.

There is another class in which the elevation of temperature is of short duration. In these the temperature, never high, falls to normal, or even below, after a few days, but the disease—the fever—does not abort; on the contrary, the other phenomena pursue the usual course and convalescence does not begin until the customary time. The following case, under my care last September, is one in point: Dr. McG., a house physician in Toronto General Hospital, had the usual prodromal headache, malaise, and anorexia; then followed elevation of temperature for not more than a week, after which it was normal, or a little below it. The facies, the peculiar odor, and the coated tongue of typhoid fever, were present; the bowels were constipated; the prostration was quite as marked as it is after a typical course of average severity, and the convalescence was quite as protracted.

In a third class, instead of febrile movement, the temperature is normal or subnormal throughout. Strubé noted fourteen such cases in a typhoid epidemic among the German troops at the siege of Paris.* The usual symptoms were present, including delirium, which was furious in some. One died of complication, and the autopsy showed the typical enteric lesions. A few such cases occurred in the Toronto General Hospital some years ago.

I might here venture the suggestion that the febrile distendence of the third and fourth weeks of enteric fever is partly if not wholly due to septic poisoning. By this time the temperature becomes increasingly remittent, with more or less free perspirations, as occurs in mild pyæmia. This change in the temperature occurs when the sloughs are being cast off, and large ulcers, with decomposing tags of mucous membrane still adhering, have formed in the bowel—conditions favorable for the absorption of septic poisons.

*Quoted by Shattuck, *Boston Medical and Surgical Journal*, 1889, ii p. 221.