

GENTLEMEN,—We have now gone over the principal facts connected with the great subject of fever and its treatment, and have been much occupied with the local affections referable to one or more of the large cavities; but I trust that the junior members of the class will not imagine that, as a rule, they are to put all the recommendations given into force in any one case, or that I would encourage any meddlesome or complicated treatment in fever. There are cases in which you will have to change your hand several times in the course of the disease; but the worst kind of physician is the man who, from his own timidity or want of confidence in himself, is constantly changing his treatment and interfering with his case. You may still meet such practitioners—I regret to say it, too frequently—physicians, who have not learned to look at fever as a whole, who do not recognize the law of its spontaneous subsidence, or the great fact—especially as regards the nervous conditions—that the toxic state is to be looked to more than any supposed organic change.

I remember a case of bad cerebral typhus attended by a gentleman who every day made a new diagnosis, and who at last gravely assured me that he had come to the conclusion that there existed *acute inflammation of the hippocampus major!*

You must engrave on your minds that fever, although often showing secondary functional or organic anatomical change, may run its course without such complications. In these simple, or so to speak normal, cases you have to see only that the patient is placed in the best condition as regards ventilation, cleanliness, and fitting nourishment; that stimulants are given when indicated; and that the state of the bladder and bowels is attended to. Should symptoms of local suffering occur, you are to meet them—at least in the first instance—as signs of functional rather than of organic disease, and seek to relieve them at the least expense to the system. You will remember what has been so often impressed on you here and in the wards—always to consider the *epidemic character*; and that in fever danger arises from debility—often an early effect of the poison; or, on the other hand, from the varied and inconstant forms of the secondary functional and organic conditions.

To conclude, it would appear that the more fever and its effects are studied—whether at the bedside or in the dead body—the less importance will be attached to anatomical change. It is to the varying condition of innervation and of the chemico-vital states of the fluids that the great phenomena of Continued Fever are to be referred.

In relation to the weighty question of *prognosis*, you will ever re-

member that the course of a fever will be favourable in direct proportion to the absence of anomalous circumstances—even though individually these may indicate freedom from disease.

APPENDIX B.

The following observations have been furnished me by my colleague, Dr. A. W. Foot, as bearing upon the subject of the use of the thermometer in fever in our medical wards.

The thermometer has been in daily use in the medical wards of the Meath Hospital for many years. Its value as a reliable clinical aid in the diagnosis and prognosis of acute disease, especially in essential fever, has been established as fully as it has wherever else this instrument has been habitually employed.

During the past three years, 1871, 1872, 1873, 9248 observations on the temperature of the sick have been made in the medical wards. The observations are made twice daily, at or about 9 A. M. and 9 P. M., by the clinical assistants, the practising pupils in charge of the cases, or the physician on duty, and are recorded on the clinical charts of temperature published by Harvey and Reynolds of Leeds.

Of the 9248 observations 3696 were upon cases of typhoid and typhus fever; the remainder were upon cases of simple continued fever, scarlatina, measles, variola (1026 observations), lung diseases, erysipelas, cerebral fever, etc.

Of the 3696 observations on typhoid and typhus fever, 2649 were upon typhoid and 1047 on typhus fever. It has to be observed that there has been during the three years above mentioned—1871, 1872, 1873—much less demand than usual for the admission of “fever” patients—in part perhaps owing to the intercurrent of the smallpox epidemic.

The 2649 observations in typhoid fever were made upon 70 cases. The highest temperature registered among these was 107.2° Fahr., and the lowest temperature 94° Fahr.

On 27 occasions temperatures of 105° Fahr. or upwards were registered in typhoid fever in 15 patients, and of the 15 patients in whom the temperature on one or more occasions reached 105° Fahr. or upwards, five died. On four of these cases whose illnesses had been marked by high temperature *post-mortem* examinations were made.

(a) A girl aged 16, temperature on 30th morning 107.2° Fahr., died on the 31st evening. Her mean temperature (51 observations) during the 26 days she was in hospital was 103.1° Fahr.

The morning temperature, 107.2°, was coincident with severe rigors, preceded by violent pain in the abdomen, ushering in peritonitis, not due to perforation, but to propagation outwards of the irritation arising from numerous and extensive ulcerations of the intestinal glands.

(b) A female, aged 24, who died on the afternoon of the 36th day. Her average temperature was 102.1° Fahr., but did not exceed 105.2° Fahr. There were 17 patches of ulceration in the last 53 inches of the ileum, pleuropneumonia of the right side with exudation of plastic lymph and sero-fibrinous fluid in the right pleural cavity.

(c) A female, aged 20, who died on the 36th day, with most extensive ulceration of both solitary and agminated follicles of the ileum. Her mean temperature (45 observations) during the 28 days she was in hospital was 102.3°.

(d) A lad, aged 16, who died on the 15th evening of his illness after repeated intestinal hemorrhages. The mean temperature (14 observations) during the seven days he was in hospital was 103.5°.

(e) A young man, aged 18, who died on the 15th evening. On the 9th evening his temperature reached 105.8°. He was of intemperate habits, and had albumen in the urine. The mean of 16 observations on his temperature during the eight days he was in hospital was 104° Fahr. In this case a *post-mortem* examination was not obtained.

Cases have proved fatal in which the mean temperature was not very high, especially under two circumstances—great protraction of the fever, and the collapse consequent upon perforation. Of this latter kind two examples have been verified by *post-mortem* examination.

(a) A man, aged 40, brought into hospital in collapse on the 10th day of illness, and who lived until the morning of the 16th day. The mean of 12 observations during the six days he was in hospital was 99.5° Fahr. His temperature on admission was 97° Fahr.; the highest it reached in hospital was 100.8° Fahr.

(b) A man, aged 27, brought to hospital on the 8th day of illness, and who died on the 11th morning. His mean temperature during the four days, or part of four days, he was under observation was 100.2° Fahr.; the lowest point he reached was 97.7° Fahr.

In contrast with the two preceding cases is the case of a boy aged 18, who was brought to hospital in a state of collapse from perforation, and who only survived his admission 40 hours; the mean of three observations showed an average temperature of 103.7° Fahr.

In these three cases the intestinal perforation was discovered after death, and in each case fecal extravasation had taken place.

The extremely low temperature of 94° Fahr. was observed in a young woman, aged 24, upon the 24th morning of her illness. She was under observation during the whole course of her illness, as she got typhoid fever while under treatment in the medical wards for a different affection. She recovered, but had a long fever. Her chart was discontinued on the 46th day. She had during convalescence several abscesses over the sacro-iliac articulation, which were evacuated by aspiration.

Mistrusting the accuracy of the practising pupils' observation, I repeated it myself at 9½ A. M., and found the temperature of the axilla, with every precaution to secure accuracy, and with a correct instrument, to be 94°. The body felt cold and clammy like that of one taken out of water; cutis anserina was most strongly marked; she had no new abdominal symptom; the pulse was 88, regular, and easily felt at the wrist; the respiration 26. The collapse came on early in the morning; the temperature on the previous evening had been 101.6° Fahr., the pulse 101. She was quite conscious and sensible, felt cold, but had no pain anywhere; there was a tendency to vomit. She had not been taking any antipyretic medicine. The temperature began to rise from noon, and by 9 P. M. had risen 6.2° Fahr. higher than it had been in the morning. This sudden collapse was never accounted for. The highest temperature recorded among 70 observations made on her case was 105.5° on the 12th evening.

Among 1047 observations made upon 43 cases of typhus the highest temperature recorded was 106° Fahr. On twelve occasions temperatures of

105° Fahr. or upwards were observed in the cases of eight patients, four males and four females. Of these eight cases in which temperatures of 105° Fahr. or upwards were observed, two died: one—that above alluded to—in which the temperature reached 106° on the 16th evening, was a man, aged 34, affected with well-marked sclerosis of the posterior columns of the spinal cord (autopsy made); the other was a man of bad constitution, and 43 years of age, who succumbed on the 14th day.

Deaths from typhus of course occurred in cases whose temperature did not reach 105° Fahr., other lethal conditions being in operation. For example, a boy, aged 17, died on the 10th evening of typhus caught during a convalescence from scarlatina, which in its turn had followed closely in the footsteps of typhoid fever. He had been exposed to infection in a fever hospital. He was brought to the Meath Hospital desquamating, but covered with a copious typhus eruption; he had epistaxis, hæmaturia, green vomiting, and died in convulsions. His temperature did not exceed 104° Fahr., and was twice in the six days he was under observation as low as 98° Fahr.

The employment of the thermometer has proved of great value in the diagnosis and prognosis of a given case, in distinguishing a factitious from a genuine convalescence, in estimating the severity of a case, in estimating the results of antipyretic treatment, in detecting imposition, as an indicator of complications. The students are soon firmly convinced of the great value and importance of medical thermometry, and the patients have never expressed themselves as in the slightest degree annoyed or fatigued by even the frequent use of the instruments. Its employment is general in the medical wards, and by no means confined merely to cases of acute disease.