is also one of the most important diagnostic evidences of this fever. During the first week it has a morning range of moderate febrile rise, but in the evening there is a marked ascent, with a fall again towards morning, each morning and evening, however, showing respectively a higher point than that of the previous day, until about the eighth day, when in an average case the highest point is attained. This varies according to the severity of the attack ;

but it is no unusual thing to register 104o or 105o Fahr. in the even­ing and 103o or 104o in the morning. During the second week the daily range of temperature is comparatively small, a slight morning remission being all that is observed. In the third week the same condition continues more or less ; but frequently a slight tendency to lowering may be discerned, particularly in the morning tempera­ture, and the febrile action gradually dies down as a rule between the twenty-first and twenty-eighth days, although it is liable to recur in the form of a relapse. Although the patient may, during the earlier days of the fever, be able to move about, he feels languid and uneasy ; and usually before the first week is over he has to take to bed, and soon the effects of the attack become more apparent. He is restless, hot, and uncomfortable, particularly as the day ad­vances, and his cheeks show a red flush, especially in the evening or after taking food. The aspect, however, is different from the oppressed stupid look which is present in typhus, and more resem­bles the appearance of hectic. The pulse in an ordinary case, al­though more rapid than normal, is not accelerated to an extent corresponding to the height of the temperature, and is, at least in the earlier stages of the fever, rarely above 100o. In severe and protracted cases, where there is evidence of extensive intestinal ulceration, the pulse becomes rapid and weak, with a dicrotic char­acter indicative of cardiac feebleness. The tongue has at first a thin whitish fur and is red at the tip and edges. It tends, however, to become dry, brown or glazed looking, and fissured transversely, while sordes may be present about the lips and teeth. There is much thirst and in some cases vomiting. Splenic and hepatic enlarge­ment may be made out. From an early period in the disease abdo­minal symptoms show themselves with greater or less distinctness and are frequently of highly diagnostic significance. The abdomen is somewhat distended or tumid, and pain accompanying some gurgling sounds may be elicited on light pressure about the lower part of the right side close to the groin,—the region corresponding to that portion of the intestine in which the morbid changes already referred to are progressing. Diarrhoea is a frequent but by no means constant symptom. When present it may be slight in amount, or, on the other hand, extremely profuse, and it corresponds as a rule to the severity of the intestinal ulceration. The discharges are highly characteristic, being of light yellow colour resembling pea soup in appearance. Should intestinal hæmorrhage occur, as is not unfrequently the case during some stage of the fever, they may be dark brown, or composed entirely of blood. The urine is scanty and high-coloured. About the beginning, or during the course of the second week of the fever, an eruption frequently makes its appearance on the skin. It consists of isolated spots, oval or round in shape, of a pale pink or rose colour, and of about one to one and a half lines in diameter. They are seen chiefly upon the abdomen, chest, and back, and they come out in crops, which continue for four or five days and then fade away. At first they are slightly elevated, and disappear on pressure. In some cases they are very few in number, and their presence is made out with difficulty ; but in others they are numerous and sometimes show themselves upon the limbs as well as upon the body. They do not appear to have any relation to the severity of the attack, and in a very consider­able proportion of cases (particularly in children) they are entirely absent. Besides this eruption there are not unfrequently numer­ous very faint bluish patches or blotches about half an inch in diameter, chiefly upon the body and thighs. When present the rose-coloured spots continue to come out in crops till nearly the end of the fever, and they may reappear should a relapse subse­quently occur. These various symptoms persist throughout the third week, usually, however, increasing in intensity. The patient becomes prostrate and emaciated ; the tongue is dry and brown, the pulse quickened and feeble, and the abdominal symptoms more marked ; while nervous disturbance is exhibited in delirium, in tremors and jerkings of the muscles *(subsultus tendinum),* in drowsi­ness, and occasionally in “coma vigil.” In severe cases the ex­haustion reaches an extreme degree, although even in such instances the condition is not to be regarded as hopeless. In favourable cases a change for the better may be anticipated between the twenty-first and twenty-eighth days, more usually the latter. It does not, how­ever, take place as in typhus by a well - marked crisis, but rather by what is termed a “lysis” or gradual subsidence of the febrile symptoms, especially noticeable in the daily decline of both morning and evening temperature, the lessening of diarrhoea, and im­provement in pulse, tongue, &c. Convalescence proceeds slowly and is apt to be interrupted by relapses (due not unfrequently to errors in diet), which are sometimes as severe and prolonged as the original attack, and are attended with equal or even greater risks. Should such relapses repeat themselves, the case may be protracted for two or three months, but this is comparatively rare.

Death in typhoid fever usually takes place from one or other of the following causes. (1) Exhaustion, in the second or third weeks, or later. The attending symptoms are increasing emaciation, weak­ness of the pulse, and cadaveric aspect. Sometimes sinking is sudden, partaking of some of the characters of a collapse. (2) Hæmorrhage from the intestines. The evidence of this is exhibited, not only in the evacuations, but in the sudden fall of temperature and rise in pulse-rate, together with great pallor, faintness, and rapid sinking. Sometimes hæmorrhage, to a dangerous and even fatal extent, takes place from the nose. (3) Perforation of an intestinal ulcer. This gives rise, as a rule, to sudden and intense abdominal pain, together with vomiting and signs of collapse, viz., a rapid flickering pulse, cold clammy skin, and the marked fall of tempera­ture. Symptoms of peritonitis (see Peritonitis) quickly supervene and add to the patient’s distress. Death usually takes place within 24 hours. Occasionally peritonitis, apart from perforation, is the cause of death. (4) Occasionally, but rarely, hyperpyrexia (excessive fever). (5) Complications, such as pulmonary or cerebral inflamma­tion, bedsores, &c.

Certain sequelæ are sometimes observed, the most important being the swelled leg, periostitis affecting long bones, general ill- health, and anæmia, with digestive difficulties, often lasting for a long time, and sometimes issuing in phthisis. Occasionally, after severe cases, mental weakness is noticed, but it is usually of com­paratively short duration.

The mortality in typhoid fever varies with the character of the outbreak, the general health and surroundings of the individuals attacked, and other conditions. At one time it was regarded as, on an average, about the same as that of typhus ; but under modern methods of treatment the chances of recovery are much greater, and the death-rate may be stated as about 12 per cent. or perhaps some­what less.

The treatment embraces those prophylactic measures which aim at preventing the escape of sewer gases into dwelling-houses by careful attention to the drainage and plumber-work, and also secure an abundant supply of pure water for domestic use (see Hygiene, Sewerage, and Ventilation). When an outbreak of the fever occurs in a family, all such matters should be specially inquired into, and the sources of milk supply carefully scrutinized. The discharges from the bowels of the typhoid patient should be at once disinfected with carbolic acid or other similar agent, and the greatest care taken as to their disposal, with the view of obviating any risk of contamination of drinking-water, &c. The general management is conducted upon the same principles as are observed in the case of typhus, except that in typhoid fever very special care is neces­sary in regard to diet. Milk, the great value of which as a fever­food was first clearly set forth by Prof. Gairdner, is of eminent service in typhoid, but it must be administered with due regard to time and to the digestive powers of the patient. When given too frequently or in too great quantity it may, by its imperfect digestion, prove a source of irritation to the bowels. Even when given with every care it may fail to agree, as is proved by the presence of un­digested curd in the evacuations. In such a case its admixture with lime water or with peptonizing agents may render its digestion less difficult, but sometimes its use must for a time be suspended. It is however, rare that milk cannot be borne when carefully ad­ministered. Barley water or simple soups, such as chicken broth, beef-tea, &c., are occasionally useful either as substitutes for or adjuvants to milk. All through the fever the patient should be fed at regular periods—not, as a rule, offener than once in one and a half or two hours—although in the intervals water or other fever­drink may be given from time to time. In convalescence the diet should still be largely milk and soft matters, such as custards, light puddings, meat jellies, boiled bread and milk, &c., but other solid foods, with the exception of fish, should be for a long time avoided. In changing the diet it is of importance to note its effect upon the temperature, which may sometimes be considerably disturbed from this cause, even after the apparent subsidence of all febrile action. Stimulants, although unnecessary in a large proportion of cases, are occasionally called for when there is great exhaustion, and in prolonged attacks. Their effect, however, should be care-