Girths and Weights.

Date.	Chest.	Waist.	Hips.	Weights.
	Cm.	Cm.	Cm.	Kilos.
June 24th ...	112	116	117	105
July 4th ...	112	113	117	105
July 25th ...	109	105	113	101
September 8th...	104	106	107	95

The result in general health was remarkable; he has gained all his elasticity of movements, his mental activity and promptness, and describes himself as feeling much younger. His circulation is better, his blood pressure has fallen 5 mm.; his pulse is now 48, but strong and vigorous.

The urine analysis of September 6th is a curious study, but is, I believe, partly due to the large amount of animal food he was taking.

I have not given any example of a large number of cases of renal calculus and other renal and bladder troubles. These cases usually show marked improvement, and often their symptoms disappear for years or entirely, whilst others only show temporary advantage. I do not consider that these cases should be reported till two or three years after manifestations have disappeared.

Chronic nephritis and arterio-sclerosis are two groups of maladies that show marked improvement. Professor Huchard, who has devoted so much attention to arterio-sclerosis and subsequent heart failure, sends many dozens of patients here, with marked advantage. He and others who hold the *toxi-alimentary* view as to the main causation of that disease explain the action of the waters as being what I will call *vehicular*, or, in other words, their flushing effect. I quite agree that is an important element of their eliminating mechanism, but I think that there are two others that apply to both kidney and arterial degeneration. First, these non-chloride bearing waters lixiviate the excess of that salt out of the system in a dilute form, and by so relieving the kidneys of a heavy secretory work allow them time and energy to expel the toxic substances that their excessive chloride work prevented them from performing. In the next place the assimilable lime salts, to which so much attention has been drawn of late, may also take a therapeutic share in the effect.

Of neurasthenia I have always personally held the *toxaemic* view, and in all the cases of that disease treated by these waters I have had unflinching success. The group of ailments which we call neurasthenia is so polymorphous and requires such a long probation time to be declared as cured, that they are difficult to give striking examples of. This is all the more so that in most cases beyond the nervous and mental instability there are other organic disturbances requiring accessory treatment, and then the problem of which did the work becomes a very involved one. Such diseases as so-called *gouty* bronchitis as well as asthma, obviously two *toxaemic* diseases, show remarkable improvement and often cure, but here again the probation period should be not less than a year.

During several years' practice I have had a few young epileptics who came to accompany their parents. I was asked whether the cure would do them good, to which I replied that unquestionably for their general health it would be. In three cases my astonishment was great at seeing their fits diminish in number and disappear without bromides; in two others this drug became much more effective. In several other cases only slight improvement accrued.

What is the meaning of this? Is it due to the removal of toxic substances, to the presence of which many authors attribute the epilepsy, or is it due to the lixiviation of the sodium chloride, which Vidal and others have shown to bear some relation to these explosive motor storms?

I am sorry that the few opportunities of observing this disease at Vittel prevents any useful study of the effect of the cure in these cases. It would be well worth the while to send any such cases which might open up a valuable method of treatment for this troublesome disease.

UNDER the will of the late Baron Schroder, head of the banking firm of J. H. Schroder and Sons, Leadenhall Street, the German Hospital, Dalston, receives a bequest of £10,000.

SCARLATINA MALIGNA.

By ARNOLD GREGORY, M.R.C.S., L.R.C.P.,

LONGSIGHT, MANCHESTER.

THE malignant or toxic form of scarlet fever is seldom met with nowadays, and a perusal of the literature in which it is described has convinced me that cases, such as came under my notice, are sufficiently rare to justify their publication. They occurred in the same family, and most of the other members suffered more or less severely from scarlet fever. The family consisted of seven children, with father and mother, who lived in a cottage in Selby. They were not robust, but much of the ordinary type met with in the working class districts of any town. The father and mother, both of whom nursed the children, escaped, as did also the eldest brother, who lodged outside; and a woman who assisted in the nursing was also unaffected. The remaining six children all suffered from scarlet fever, four of them in a severe form, three from the malignant type.

I was called on August 29th, 1905, to see the youngest child, Fred. T., aged 2 years. The illness had commenced two days previously, and I found him with mild degree of fever, slight sore throat, and a papular rash on the abdomen and limbs. The pyrexia lasted several days; some glandular enlargement developed in the neck, and later the tongue appeared somewhat to resemble the "strawberry" type. Improvement took place slowly with a considerable degree of anaemia and the development of numerous petechiae at the end of the third week. He eventually recovered completely. No strict isolation was carried out, as the diagnosis of scarlatina was not made until further developments made it quite clear.

On the evening of September 3rd Stanley T., aged 9 years, commenced suddenly with vomiting, abdominal pain, and diarrhoea. Twenty-four hours later, when I first saw him, he was acutely ill. The temperature was 104°, the pulse very rapid and feeble; there was great delirium; the tongue was thickly coated; urine and faeces, which were yellowish, watery, very frequent, and offensive, were passed under him. Death took place twenty-four hours later—forty-eight hours after the onset—without any rash being visible.

On the evening of September 4th Frank T., aged 14, began similarly with vomiting, diarrhoea, and great delirium. The tongue, at first thickly coated, became dry and very red and raw. On September 8th a typical scarlatinal rash appeared on the front of the chest, and on the following day it had spread to the abdomen. Melaena was also noted. The mouth remained very sore for long. The patient was so extremely ill when I first saw him that recovery seemed impossible. Contrary to expectations, however, he gradually improved and made a good recovery, desquamation occurring as usual.

Thomas T., aged 11, fell ill on September 5th, about mid-day. The onset, as in the two previous cases, was sudden, and the boy was prostrated and extremely ill from the start, with vomiting, abdominal pain, profuse diarrhoea, violent delirium, and high fever. The tongue, at first thickly coated, quickly became red and dry. The patient seemed absolutely overwhelmed by the poison, and succumbed on September 7th, after about thirty-eight hours' illness, no rash having appeared.

On September 11th, Beatrice Alice T., aged 16, commenced more typically with headache, vomiting, sore throat, and diarrhoea. The temperature was 102.4° when I first saw her, and a slight rash was visible on the chest; the tonsils and fauces were inflamed. The case ran rather a mild course, with desquamation.

Grace T. was the last to suffer. She had a fairly severe attack. Vomiting, diarrhoea, and a slight rash occurred in her case; after the subsidence of the diarrhoea the illness ran a fairly normal course.

Although the house contained several rooms, proper isolation was impossible. Stanley, Frank, and Thomas were attacked so suddenly and with such intensity, and when I first saw them they were so dangerously ill, that removal even to another room was not to be thought of, and they had to be nursed in the rooms in which they were at the time of onset. At that period, too, there was no hospital for infectious diseases in the neighbourhood to which the others, who were less severely affected, could be removed. The nursing, always unsatisfactory in infectious diseases when the services of properly trained nurses cannot be procured, had to be performed under most disadvantageous conditions.

Henoch, in his lectures on diseases of children, published in 1889, remarks that few medical men have not occasionally met with cases of malignant scarlet fever which have succumbed within ten or twelve hours from the commencement of the illness. The published statements of medical men in this country—at any rate, in recent years—do not bear out this view, but it must not be

forgotten that there is a tendency for the type of scarlet fever to become milder.

Dr. Foord Caiger, in his article on scarlet fever in *Allbutt's System of Medicine*, states that in London malignant scarlet fever is very rare. On the other hand, Dr. Claude Buchanan Ker points out that toxic cases formed approximately 0.6 per cent. of the total cases of scarlet fever admitted recently into the wards of the Edinburgh City Hospital. As, however, he includes in these statistics cases which die as late as the fifth day after admission, it seems probable that the majority are not of the same degree of malignancy as the cases already described. So far as the proportion of malignant to the total number of cases of scarlet fever is concerned the statistics of hospitals for infectious diseases are of little value, for of the most toxic cases many must succumb before it is possible to make the diagnosis and take steps to have them removed, while many others must be too ill to permit of their removal.

Dr. Ker* describes three varieties of toxic scarlet fever:

1. The fulminant type is very rare. Patients die with extreme rapidity, usually within twenty-four hours from the onset; cases are said to have occurred in which death resulted after a few minutes' illness. The attack commences very acutely and suddenly with intense headache, persistent vomiting, and profuse diarrhoea. The temperature is often high at first, perhaps sinking below normal in the later stages. The rash is absent, having scarcely time to make its appearance.

2. The ataxic form is not quite so severe as the fulminant, but in other respects is similar. Vomiting, diarrhoea, and delirium are severe, and the temperature keeps high. The rash appears late, or is atypical in character and distribution. The patient succumbs in from two to four days.

3. In the adynamic type the heart and circulatory symptoms are more prominent than the nervous. In this form also both vomiting and diarrhoea may be severe. The pyrexia is moderate in degree, and the rash may be well marked and possibly petechial. Death usually takes place on the fourth or fifth day.

In the forms just described the case is malignant from the beginning, but in other cases malignancy supervenes on an apparently simple attack.

Both of my cases which ended fatally belong to the first rather than the second group, while the case which recovered—and recovery is quite the exception—presented features more characteristic of the ataxic than the adynamic form.

It is undoubtedly true that in scarlet fever family susceptibility plays a part which is not evident in the other acute exanthemata. This fact is well illustrated in the series of cases narrated. Henoch, in the lectures previously referred to, remarks that "striking to me appeared the fact, noted undoubtedly by many other physicians, that if scarlet fever breaks out in a family and one of the children dies of the malignant form, very frequently also a second and a third child are taken off under similar conditions, and in this way whole families die out." It is worthy of note that in my cases the three patients so severely affected were all boys, who were nearest of age to one another, and were attacked with most startling suddenness on successive days. The child first affected, who evidently spread the infection, suffered from a mild form of the disease. It seems most probable, therefore, that the infection was not of great virulence but rather that the older boys possessed very slight powers of resistance, and were at once overwhelmed.

After puberty the susceptibility to infection diminishes. This fact also is well demonstrated in this series of cases. All the children who came into contact with the disease suffered, and most of them in a severe degree, while the mother and father and the nurse all escaped, in spite of the fact that the whole house was infected, and that they must have been constantly in the closest possible contact with the infection for many weeks.

Among other points of interest may be noted the late appearance of the rash in Frank's case. His illness commenced on September 4th, and it was not till September 8th that the rash appeared. Till then the nature and cause of the illnesses had not been clear. The diagnosis of scarlatina had been excluded when Fred's illness com-

menced, and ten days elapsed before the nature of the mysterious sequence of cases was made manifest, both deaths having occurred several days before. Most authorities agree that a definite diagnosis of scarlet fever is almost impossible before the rash appears. When the first toxic case was seen, ptomaine poisoning was at first suspected, and the help of the medical officer of health was sought. The absence of any source of such poisoning, and the occurrence of the other two cases on successive days sufficed to negative this condition.

It is only fair to say that I had had then only a small experience of scarlet fever. On looking back I feel that the first case should at least have been regarded with suspicion, and promptly isolated.

I desire to tender my thanks to Dr. G. D. Todd, of Selby, whose assistant I was at the time, for permission to publish the cases.

RECURRENT MONSTRIPARITY.

BY

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MRS. G., aged 35, a strong, healthy woman, gave birth to a full-time female child having a large cephalocele presenting from the vertex. The first pregnancy went to term, when a normal male child was born. The second pregnancy ended in abortion at the end of the third month; the fetus was anencephalic. The third pregnancy ended in abortion at the fifth month; the fetus (male) was anencephalic. The fourth pregnancy concluded at term, and is the subject of the present note.

On May 20th, 1910, when in her thirty-eighth week of pregnancy, the patient had a slight uterine bleeding which lasted a few hours. On vaginal examination no placenta could be felt, and the haemorrhage ceased with rest in bed.

The first stage of labour was somewhat protracted, the presenting part being high up and difficult to reach. The membranes could be felt as if being pushed to one side of the os by the presenting part, and on their being ruptured the presenting part progressed with each pain.

The second stage was delayed, no further progress being noticed, although the pains were vigorous.

I was asked to see the case in consultation. After the patient was anaesthetized and the bladder emptied I found it impossible to make out the nature of the presentation—it was a large soft rounded mass, the size of a fetal head.

At first I suspected the case to be one of ovarian dermoid obstructing labour, but the abdominal examination did not support this view. With the whole hand in the vagina I was able, on getting behind the mass, to recognize a vertex presentation with the tumour attached to it. Labour being still delayed, I incised the presenting mass and emptied out a large quantity of brain tissue, which showed both cerebral and cerebellar structure within the sac; the walls were $\frac{3}{4}$ in. in thickness. My fingers could now reach the cranial vault, and through an opening in the vertex I could insert three fingers into what appeared a normal cranial cavity containing brain tissue. There was no evidence of hydrocephalus either in the supernumerary cerebral structure or within the cranium. The labour terminated as a difficult forceps case.

The child was of female sex, with very large shoulders and short neck. The eyes were protruding and the nose flattened. There was very little liquor amnii, otherwise there was no associated malformation. The child lived about half an hour after delivery.

The third stage was completed normally, the placenta and membranes showed nothing unusual and there was no evidence of any adherent amnion.

The cephalocele was situate in the usual position of such tumours—namely in the mid-line in the region of the posterior fontanelle; the parietal bones were widely separated as if the two fontanelles were one.

Cephaloceles are comparatively rare, much more so than the anencephalic fetus. Ballantyne quotes Trélat as having had three cases in 12,900 labours, and in his own series of 325 specimens of antenatal deformity there were only eight cases of cephalocele, in contrast with forty-six of anencephaly.

There was nothing in the mental or physical condition of the patient throughout the whole of pregnancy to lend any support to the theories of external or internal maternal traumatism.

* In his textbook on *Infectious Diseases*.