A fair attempt to give an account of personal experience.

Not much originality a research but may help.

WLS

Pap.

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Clinical Notes of 16 Cases of Scarlet Fever.

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For several months, there has been a number of cases, of Scarlet Fever in Southport. As a rule the type has been mild; though severe and even fatal cases have been present in a considerable proportion.

Before its introduction here, it was prevalent for some time in Liverpool. By the kindness of Dr Vernon, [Medical Officer of Health in Southport,] the writer is able to state that the cases imported from Liverpool. After its introduction here, the disease became less severe in type, probably owing to the excellent sanitary condition in which Southport now is.

From September 1881, when I began, until January 1882, the writer had in his practice 16 cases; in all of which a favourable termination was obtained. The majority were mild and uncomplicated, but several interesting cases occurred.

In one case, which began with an attack of laryngismus stridulus, an Endocardial Murmur supervened about the 4th day; in another the first symptom present was a convulsion. In two cases the temperature exceeded 105; the highest point noted being 106. Rheumatism of the joints was comparatively common, but in no case in which it occurred was the heart affected. There was only one case of desquamative nephritis, but in that case severe fits of eclampsia supervened. The case, however, was not under

treatment until the appearance of the dropsy A description will just be given, of the symptoms present, and the treatment adopted, in the majority, after which details, from notes taken at the bedsides, will be afforded of some of the more severe cases.

Vomiting was universally present on the first day, and nausea, chilliness succeeded by fever headache lassitude, slight uneasiness of the throat, thirst and anorexia were very general on that day. In only one case did the vomiting persist beyond the first few days. Unusual drowsiness and rigors were not at all common The pulse and temperature did not, except in the grave cases, present that extraordinary and rapid rise which is one of the most characteristic symptoms of this fever. A pulse of 124 and a temperature of 105° were however noted on the first day. In one case a rise of several degrees took place in a few hours

On the second day, with only one exception in which it was never present, the rash made its appearance. It was always first noted on the inside of the arms, chest and thighs. In the majority it was scanty and was confined to these places, but in several it spread over the abdomen and the loins together with the legs & arms. Where the hands were affected swelling and stiffness due to infiltration of the integument, were noted. Contrary to the statements of several of the text books the face was never affected with the rash, though it was sometimes irregularly flushed.

In the majority I was only presented as a flushed papules completely isolated from each other, but in several I became quite universal, so that the skin presented the appearance of a boiled lobster. The arrangement was irregular in character on the trunk, but on the arms and legs was much more uniform. Miliary vesicles were rare and neither bullae nor petechiae were ever present. Where scanty I began to fade by the 4th day and was almost gone by the 5th, but where well marked continued to develop until about the 6th day. Concurrently with the rash the throat symptoms developed.

In every case on the first few days the tongue was coated in the centre, and through the fur the enlarged papillae could as a rule be detected. The tip and edges presented at the same time the usual red appearance. In the very mild cases the fur cleaned and the tongue become normal, in cases more severe it presented in some the "strawberry" appearance, while in the graver cases it became dry and brown. Considerable swelling and congestion of the soft palate, pillars of the fauces, tonsils and uvula were present in the majority, and while ulceration of the tonsils occurred in several, in no case was sloughing present. The impassaled secretion on the tonsils presented sometimes almost the look of a false membrane. The salivary glands were not seriously involved but in one or two cases the submaxillary lymph was present

how many? out of 16 -

In only a few instances was the nasal secretion much increased, but in one it was very profuse and acrid, excoriating the upper lip. Sordes on the lips and gums were only present in the graver cases.

In no case was there any serious affection of the lungs, but the respiration was always somewhat accelerated.

The urine in the febrile stage was scanty and high coloured. Albumen was detected at an early date in one case, but the writer regrets that the urine of every case was not examined albuminized.

In the older text books diarrhoea and an excoriated anus are mentioned as of common occurrence + they owed them to the system of purgery then in vogue. The bowels were as a rule constipated, but were easily regulated by simple aperients.

In a very considerable proportion of cases, more or less delirium was present at night, but attention was called to be remarked by Hebeden, who stated "there is no disease in which the patient is more apt to be delirious and with less danger than scarlet fever."

About a week when the pulse + temperature were almost normal the rash subsided and the swelling of the throat almost gone, desquamation began. It has often been noticed that in cases where the rash is well marked + the fever high the desquamation begins early + occurs in large patches, on the other hand in mild cases ~~cases~~ it begins most + takes place in small pieces.

Good illustration was afforded of this point, for in one or two severe cases, I began on the 4th day before the rash had reached its acme, and proceeded at a rapid rate. In some of the milder cases I did not begin until the 2nd or 3rd week and proceeded very slowly

I may not be in place to observe here, that there is probably a desquamation of the epithelium of the stomach and intestines, just as in the case of the skin, since there is such evidence that the tongue desquamates. I may also be inferred that the cells lining the tubules of the kidneys are cast off in a similar manner. The fact that nephritis is most common from the 14th until the 21st day admits of a double explanation. The skin while desquamating is unusually susceptible to cold, which checks its action, thereby throwing the work on the kidneys; as they themselves are probably desquamating at the same time, they are very liable to inflammation with the extra work.

The importance of an early detection of specific fevers demands that something more should be said of the 4 most characteristic initiatory symptoms. These symptoms are vomiting sore throat, the increased frequency of the pulse and rapid augmentation of temperature

It has already been stated that the pulse and temperature presented the characteristic rapid rise only in the severer cases, so that in the mildest cases where the difficulty of

forming the diagnosis on the first day was greatest. These symptoms were not available for that purpose. Slight tenderness & swelling of the throat were very general on the first day, even in the mildest cases, but the greatest reliance was placed on the vomiting when it was unprovoked. In one case only did the vomiting persist, while as a rule it began to amend on the second or third day. How ever the severity of the subsequent attack was in some degree measured by the initiatory vomiting, yet the rule was seen to be not without marked exceptions.

Dr Jenner's recent researches throw light on the probable causation of the vomiting. His researches go to prove that a primary effect of the poison of Scarlet Fever is suddenly and violently to stimulate the cells of the various secreting organs. Burton in his Diseases of the stomach observes on this point "Post Mortem examination in fatal cases of Scarlet Fever, which have died from the 3rd to the 7th day, will often shew that the inflammatory exudation seen on the tongue and fauces extends through nearly the whole of the digestive canal, and is most distinct in the stomach, where the casting off of patches or shreds of false membrane is often accompanied by a scanty hemorrhage of grumous blood"

It will be noted how very general the exudation is and how it is most distinct in the stomach.

In these fatal cases no doubt, the cell growth is much greater than commonly occurs, still the special tendency to affect the stomach in

all cases may be inferred.

The vomiting of Scarlet Fever has therefore also origin in a semi acute gastritis, manifested as a rule only by the innocent nausea and vomiting, but occasionally also in addition by epigastric pain and uneasiness.

The early affection of the kidneys, lately shown to be so common, owes also no doubt to this same stimulation of the cell growth.

Though somewhat out of place, I may be here remarked that the period of incubation is as accurately known in only 5 cases. The longest was 6 days and the shortest only three.

In no case were any distinctive symptoms present during the period of incubation.

+ how known? a little detail here would be not amiss. We can't afford to take a mere ipse dixit on a point like this.

Treatment
was strictly expectant. If the vomiting was
severe, effervescent saline or bismuth were given,
and very simple diet only was allowed. It
was thought as the stomach was suffering from
some acute gastritis the best medicine for the
first few days was as much rest as possible.
When the appetite returned in few days the
diet was gradually improved. The statement
has been made that patients who are well
fed during convalescence are more liable
to nephritis & the other complications. Greater
importance was however paid to warmth and
flannel clothing and the confinement
of all patients in one or two rooms until
desquamation had entirely ceased. To this
latter fact the writer thinks the freedom
from nephritis is due. It was only however with
difficulty that patients who had only been
in bed for a few days were persuaded that
confinement to the house was necessary.
This confinement is however in the milder cases
the only important point in treatment.
The throat was treated by inhalation of hot
water, gargles, and compressed tablets of
Chlorate of Potash; where ulceration a
solution of permanganate of Potash was
applied with a brush. In several instances
small pieces of ice gave relief, but in
the writers own case, the inhalation of steam
afforded most relief.
Externally an ointment of Belladonna
& Glycerine was rubbed on the skin

and over this large linseed poultices were applied. Not only does the poultice relieve at the moment of application, but the belladonna, the use of which is commenced, moderates the inflammation and prevents the tendency to suppuration. Even in severe cases, improvement was manifested, under this treatment, by the third day. The poultice frequently renewed soothes the intolerable pain and allows the patient to obtain sleep.

To relieve the burning sensation caused by the dry hot skin tepid sponging was freely allowed. By this means the nervous system of the patient is soothed sleep is procured and a good night secured. Even when the patient was seeming fairly good nights delirium was only too common, and after one or two restless nights it was almost universal. Heberden's aphorism was borne in mind and beyond an occasional dose of Bromide of Potash to secure sleep nothing whatever was done. His very apparent that in short fever with often a high temperature, delirium will be of common occurrence, and in view of the early defervescence, will not as a rule prove dangerous.

With regard to the drugs employed small doses of hey. Ammon. Acetatis were very generally given with the effect of relieving the extreme dryness of the skin to some extent. At present Carbonate of Ammonium is highly lauded by Ringer and others. It was given in severe cases at the beginning,

and always when the pulse became more
frequent & very soft, in several of these
latter the pulse began at once to improve
under its use. Given in several severe cases
× where the rash was well marked the temperature
began to fall on the second day. The fall
was always slight (but) still I was distinct.
It was also once or twice combined with acon. ite
with a similar result. The temperature fell
slightly, the skin became moist, the
patient became less restless and sleep was
attained, by which the tendency to delirium
was checked. It is not probable that acon. ite
or carbonate of Ammonia have any direct
influence on the specific fevers. They
determine to the skin, soothe the nervous system
produce sleep thus reduce the fever indirectly
Acon. ite perhaps has more control over the
inflammatory complications.
The temperature of Scarlet, as is well known,
differs from that of small pox, in rising
with the appearance of the rash. In cases
where the ammon was not given it did not
begin to fall until the 3rd or 4th day
at the earliest, but where it was exhibited
the fall, though slight began on the
second; and it is to be remembered that
it was only given in the graver cases
where the temperature was high the throat
much swollen & sometimes ulcerated.
As acon. ite was only given with the ammon
nothing can be said as to its separate action
in the fever

While disposed to regard the administration of Carbonate of Ammonia with favor in suitable cases, the writer thinks that there is a great tendency to degrade it into a routine. Dr Pratt under its use "did not lose one patient in nearly 300 cases." Many of these cases were doubtless benefited by its use, but is impossible not to believe that it was given by him unnecessarily in a large number. No doubt it is unfortunately necessary always to give something in private practice, but less something may easily be more agreeable than carbonate of Ammonia. The point is of practical importance in England at least, where there can be no doubt, a large measure of the success attained by the Homoeopaths, is due to the ease with which their Medicines can be taken. Cold baths, even with a temperature of 106 were not given in view of the insuperable objections entertained to their use here Where the pulse was scanty warm baths were frequently given to aid its development, and tepid sponging was often used to allay the burning caused by a dry and hot skin. The subject of the administration of alcohol has been postponed until the point, because it was only given in one case, in which very marked debility was present. So much was this the case that the child was totally unable to swallow and had to be fed through the nose In that case a teaspoonful of brandy every two hours helped to save the child's life Alcohol was withheld, even in cases where considerable weakness was present, for two

reasons; fustly because of the short duration of the fever, and secondly because all the cases occurred in children and young persons wholly unaccustomed to its use. Where great weakness was present nourishment was placed on the cuticle of Ammonia and a richer diet than was generally allowed. In these cases Stimulating soups, beef tea replaced the milk diet in general use during the first week.

Note. It has been said that even with a temperature of 106° cold baths were not given, in view of the strong objections entertained to their use here. Any further use, the undersigned intends to treat with cold baths however. The objection to cold baths, extends also to the application of iced cloths to the abdomen; they are both supposed here to drive the fever in.

Every case was as far as possible, isolated at the top of the house, and the most thorough antiseptic precautions were taken.

When desquamation began Carbolic Oil or Glycerine was rubbed all over the body once a day, to hasten the desquamation and to prevent its occurring in the form of a dry scurf.

Case of T. A

This child was first seen by the writer on the 10th October shortly after the occurrence of a fit of eclampsia, consequent to an attack of desquamative nephritis

The history of the case was only imperfectly obtained from his grandmother, (Mrs B) with whom he was residing.

T. A aged 6 was a delicate boy and had been sent to Southport some months before for his health. Mrs B said at first that the child had been quite well until the day before he was seen but on being minutely questioned admitted that he had a slight "illness" about 6 weeks before

So little was the child affected that he was never confined to bed though kept indoors for a few days. He soon seemed however well all right again and for several weeks had been playing on the sands with other boys

On the 9th October his bowels were rather relaxed, and his face and legs slightly swollen; nevertheless he had been out of doors on that day which was cold and wet. It may be remarked that the weather had become much colder for several days before the 10th

From the description given it seems to have been general in character, affecting the whole muscular system, and during its continuance impaired vitality was produced.

When seen first the most striking feature was the anasarca present. This was universal but was most marked on the face, the legs and the scrotum, which was largely distended

The child lay in a semicomatose condition and could only be roused with difficulty.
Skin was dry and cold, pulse weak, and the pupils were observed to be dilated and not contracted; they showed some slight sensitivity to light. The patient was made to protrude his tongue with difficulty and it was found to be thickly coated with a yellow fur. + Physical examination showed sluggishness of both bases of the lungs and a subcrepitant rale could be heard both back & front. There was no hydrothorax. He was said to have had a slight cough for a few days.
He had passed two ounces of urine that morning, which was examined during the course of the day. It presented the appearance of mucus was hazy and was almost solid when boiled for albumen. By the microscope, free blood corpuscles, blood casts, epithelial casts & renal epithelium distinguished by globular characters, were detected.
The child was dry cupped & mustard poultices were applied to the loins & bases of the lungs. A mixture containing acetate of Potash and sp. ætis nitrici was ordered every 4 hours, and a powder of 10 grs of the Compound Powder of Jalap, and 30 grs of Bitartrate of Potash was directed to be taken at once. The diet allowed was milk, diluted with plenty of cold water.
The child was removed to the loft of the house, a sheet wet with Condy's fluid hung across the door, the fire lighted and an extra blanket ordered.
The child was again seen in the evening

when his condition was found to be very much the same. He had been roused to take the powders, which was immediately vomited and the acetate of Potash in mixture had been twice given with a like result. A little milk and water had been retained with difficulty.

Hearing that great difficulty was experienced in getting the child to take the medicine and considering also that he had been sick immediately after administration, and that he seemed more drowsy than in the morning, it was determined to use the hypodermic injection of pilocarpine. Hearing obtained a solution, ½ gr was injected. In about 2 or 3 minutes sweating began & the most profuse character, indeed so much was this the case, that at the visit next morning I was reported, that his night dress was completely soaked, and had to be changed.

First flushing and then pallor of the face noted, the pulse was observed to quicken. The Salwa was secreted freely, and slight watering of the eyes and running at the nose were also noted. No immediate effect on the cough was detected, but next day though looser, it was rather more frequent. The injection did not produce at any time headache or giddiness. ×

The Bowels not having been moved that day, an enema was ordered to be used in the morning if necessary

11th Morning. Child seemed better, was not so drowsy. He had slept fairly well, and had retained some milk & water, but was sick twice.

The dropsy of the face and legs was slightly diminished, but the scrotum was quite as much swollen; and the cough had been rather more troublesome.
Shortly before the visit he had passed water, the first time in 24 hours, to the extent of 3 ounces; which was similar to that examined the day before. The bowels had been moved without the enema.
An Aperient injection was given, and the poultices were repeated over the loins; in addition one was placed over the stomach to allay sickness.
Of milk & water about 2 pints were ordered in the 24 hours
Evening. Slight improvement in dropsy was manifested. He had only been sick once and had taken freely of milk & water. The cough continued rather troublesome.
Physical examination showed that the oedema of the lungs was still present.
The pulv. aperient was again given, and 10 grs of Pulv. Jalapæ Co were ordered to be taken in milk
12th Morning Seemed much better. The swelling of the face and legs was greatly diminished, but the scrotum did not show any great change He had not been sick again, and had taken freely of the milk & water. Bowels were moved once, and about half a pint of urine had just been passed. For two days before he had only passed 5 ounces
He was now much clearer in appearance though still smoky, and the quantity of albumen was still considerable. The cough was still troublesome, so much so that his friends wished for a cough mixture but physical examination

showed that the oedema of the lungs was diminishing
The injection again used, and as the appetite
was now much improved, and the sickness had
ceased, a little bread was allowed with
the milk
Evening. Urine had been voided to the extent of
2 pints since morning, and was much clearer
Pilocarpine not given, but the diet was con-
tinued as before
13th Morning. Dropsy of face & legs almost gone,
and that of the scrotum much less. Diet con-
tinued steadily to diminish and was quite
gone by the 16th. The urine continued to be
very fully voided, but albumen was still
present as a considerable haze.
The cough at last began to improve, and as
was to be expected the oedema of the lungs at
the same time diminished & soon ceased.
With the milk, potatoes, and bread and
butter pudding were now allowed.
The next day the improvement continuing
meat, eggs & a mixture containing Sp
Æther Nitrici were given.
Faint traces of desquamation were still visible,
and for this as usual, Carbolic Oil was
given.
His progress was uninterrupted, but there could
be detected for about a week a faint haze of
albumen in the urine, after allowing it to
stand some time after boiling. This however
ultimately quite disappeared

Cases of this kind are only too common. A very mild case, in which the child is not at any time confined to bed is followed by a most severe complication. The occurrence of nephritis nearly 6 weeks after the exanthem is rather later than is usual, but shows the value of the rule adopted in all cases; viz, the patient was never allowed to leave one or two selected rooms until the desquamation had entirely ceased

With regard to convulsions in acute Bright, their exact causation may be said to be still unsettled. It is not probable that all cases are due to 1 cause. Some may be due to an incomplete metamorphosis of nitrogenous waste into urea, while most are probably owing to a poisoning by urea whether as such or consequent to its conversion into carbonate of Ammonia. Others again probably owe their origin to an anaemia of the nervous centres which is produced by oedema. It is well known that in this disease serous effusion occurs readily into the various internal organs. A dropsy of the connective tissue of the brain may readily therefore take place. The frequency and rapidity with which patients emerge from a comatose state by an efficient purge or a profuse diaphoresis favours the latter theory. In chronic Bright, however, where with scanty dropsy convulsions occur, then causation must be due to uraemia in all cases.

In this case the convulsion & semi-comatose condition were attributed to the dropsy of the nervous centres for several reasons; the first of which was the state of the pupils. In renal

disease where uremic poisoning occurs, the pupils are as a rule contracted, here however they were widely dilated; it may be however that during life they were contracted, and that they dilated afterwards. In post mortem hemorrhage as is well known immediately before death, in many cases, the pupils dilate, and hysterical paroxysms & convulsions occur. In these cases there can be no doubt that the dilatation and convulsions owe their origin to the anaemia of the brain, produced by the bloodless state of the patient.

It is quite admitted, that with our present knowledge of the effect produced on the pupils by cerebral disease, too much importance cannot be attached to the dilatation. In many of the cases of apoplexy the pupils are contracted no doubt, but in them the hemorrhage is into the pons. Taken as a whole dilatation of the pupil is one of the pressure signs.

In the second place there was the evidence that the dropsy affected the lungs, and the inference, considering that fact, together with its extensive external manifestation, might be drawn that the brain also was affected.

Thirdly, the appearance of the convulsion was so early that there could not have been much urea in the system

Lastly there was no uraemic odour detected in the breath respiration or vomit.

With regard to the importance of convulsions in renal disease, in children, it is well known that they are not so serious as in the adult.

It may be that a lesser degree of anaemia, or a smaller quantity of poison is sufficient to produce a convulsion in them. In 12 cases under treatment by West, I recovered, and in 13, fourteen of which are collected by M. Rilliet, to find a favourable termination In this case there was only one, but had there been three, increasing as is usual in severity, a fatal result might easily have ensued. With regard to treatment. The diet was such as to limit the production of urea and creatine as much as possible, animal food being strictly interdicted for several days. The milk was largely diluted with water, and it was hoped, in the words of Dr West that a pint or two of cold water would form a useful adjunct to treatment. At the end of a week beef tea, thin soup & eggs were given freely With regard to the drugs generally used in acute nephritis; in England there is still a strong tendency to reject the use of diuretics, owing no doubt to the original remarks of Bright. Dr G. Johnson remarks, "there has been, first, a morbid condition of the blood, which has excited disease in the kidney. Our double object must therefore be to rest the affected glands, while we purify the blood by means of the other excretory organs.

Christison in 1839 observed that "diuretics do not increase the coagulability of the urine in the early stage; in many instances they appear to diminish it"

Bucknow, in deny the fact that the solid cylinders are blocking the tubules, advised the use of diuretics, especially digitalis, and said that

the patient should drink largely of water and take fluid nourishment.

The writer has seen a few cases treated without diuretics, by chalice fumigations, diaphoretics & warm baths, and does not think the results so good, as those obtained from their use.

It was intended to treat this case by diuretic doses of acetate of Potash in combination with digitalis, together with the occasional use of a Compound Powder of Jalap. The obstinate sickness after every dose of the medicines compelled their discontinuance. Having seen benefit from the use of pilocarpine in two cases of Bright's disease about a year before, it was employed. In this case it produced very profuse sweating after which the child received somewhat from the rheumatoid condition. In addition salivation watering of the eyes, increase of the nasal secretion, resulted in a slight degree from its use. Next to the sweating its most marked effect however was on the Bronchial Secretion which was considerably augmented as evinced by the troublesome cough. After its discontinuance the cough improved rapidly, but at the same time the oedema of the lungs was being absorbed. It seemed likewise a slight narcotic effect, but did not contract the pupils. On being asked when no longer drowsy, if headache or giddiness resulted from its use patient said no. The vomiting was certainly not increased by its use, but as it is now advocated by some to arrest sweating, it may yet be found useful in sickness.

The writer has used it himself in three cases

of acute nephritis & seen employed in several others, in all of which a prominent benefit was derived from its use. He thinks however that it ought not to supersede diuretics in common cases, but should be reserved for those in which sickness is obstinate, as in this; where the patient is in a semicomatose condition and can only be aroused to take medicines with difficulty. It is much easier given than a warm vapour bath and there can be no danger from cold in its use. To give a vapour bath to a patient suffering from nephritis in private practice is not always easy.

In certain exceptional cases it will be found therefore of great use. and in all cases an occasional administration may be a useful adjunct to treatment.

Poultices & dry cupping were also employed more as a matter of routine, than from any great faith in their efficacy

Case of R. K.

This case was peculiar in its onset and during its progress a rare complication was detected.

R. K. is aged 4 and is one of a family marked by a strong tendency to attacks of laryngismus stridulus in childhood. Several of the other children beyond 10 years of age have ceased to have these attacks, but R. K. is still liable to them. It may be remarked that there is no history of enlargement of the thymus to account for this strong family tendency, which does not cease until the children attain an age of nearly 10 years of age.

On being summoned in the morning of the 27th Sept at 5 A.M. I was found he had just emerged from an attack. A simple aperient mixture was ordered. He was seen at 10 A.M. and was found to be better, but his skin seemed hot and feverish. The temperature was 99.2. In the evening he was found to have been sick several times during the day. There was a little cough present and the tongue was slightly coated. The aperient mixture had been taken twice and his bowels were freely moved. Careful physical examination detected nothing. Pulse 90. Temp 100.1.

Milk & tea only allowed. A poultice was ordered on the epigastrium, and ½ gr. of calomel & opium in pill was given every 4 hours.

28th Morning. The sickness was found to have continued. Temperature 99.8.

Pills & poultice continued.

Evening. Sickness slightly better, but

appetite quite gone. Pulse 100 Temperature 100·6
It was now evident from the sickness, and temperature
that there was something more than hurrying symptoms
should be present, and Scarlet Fever, from the symptoms
and its prevalence was suspected. On minute inspection
of the body there were found a few small papules on
the inner surface of the upper arm; the throat was also
examined and found to be quite normal. There
were none of the other usual initiatory symptoms present.
Mrs K was advised that the child had a
mild attack of scarlet Fever; the other children
were ordered from home and the usual antiseptic
precautions were taken
29th Morning. He was found to have passed
rather a restless night that had been slightly
delirious. The eruption which was very scanty, was
found to affect the chest to a slight extent.
The tongue was cleaning and becoming normal
but thirst and anorexia still were present,
while the throat continued entirely free. ×
On the previous evening no change had been
made in the treatment, the regimen of calomel
pills being continued for the sickness and
nothing else being given. A warm bath
had been given however to deal with the thirst.
30th Morning. He was found to have had another
restless night, and delirium was again present.
The throat was now a little swollen, the
tongue cleaning, the appetite improved slightly
but sickness still present. Temperature 101·5°
Evening He has had a restless day and now
complains of pain in the cardiac regions,
but there is no change in the other symptoms.
On examination the first sound over the

aortic cartilage was found to be rough and prolonged. Pulse 105 & temperature 101·4
October 1st Morning He has been very restless indeed during the night. He was in much the same state. complaining of the sickness, and the cardiac pain which he said was in his stomach. On examination the roughness and prolongations of the 1st sound were found to be still present.
The pills for sickness were continued, milk and ice only allowed, and a poultice (linseed) was ordered to be applied over the heart. He was further ordered to be very still in bed.
The temperature had now gradually risen to 102 3 the pulse which was between 110 & 120 was becoming weaker
Evening. This was now the evening of the 5th day and the throat was nearly well and eruption quite gone The temperature was however now 102·4 the pulse nearly 120. The continued rise in the pulse and temperature, in such a mild case, together with the cardiac pain and prolongation of 1st sound [a murmur could not be said to be as yet present] showed that there was some heart mischief. A consultation was therefore arranged for the next morning
October 2nd. He had again been restless & delirious during the night, and very little sleep was obtained. In consultation with Dr Shaw. The heart was again examined and a distinct U S murmur was heard. It was most distinct over the aortic cartilage, but could be heard also at the apex. It also extended down the right side of the sternum to the xiphoid cartilage, and was carried

into the arteries of the neck, with diminished distinctness; it could not however be heard at the angle of the scapula.

Since the application of the pultice the cardiac pain was relieved, but the sickness through improved was not cured.

Temperature was 102·6 the pulse 120, and much weaker.

A mixture containing carbonate of Ammonia in 3 ss doses was ordered, and a blister the size of half a crown was put over the seat of the greatest intensity of the murmur

Evening. The blister was found to have risen well, and had caused a good deal of pain. The heart could not now be auscultated over the cardiac cartilage, but near the lower end of the sternum the murmur was heard as in the morning.

The blister was repeated on the 7th and Iodide of Potassium was substituted for the ammonia which seemed to increase the sickness, and also because the pulse was slower and stronger.

The temperature, the highest point of which was 102·6 began to fall on the 4th and in about a week was normal. The pulse also became slower, but for several weeks, averaged about 80.

The blistering prevented the murmur from being heard for some time, but on the 10th it was not nearly so loud; from that date it gradually diminished, and when he left home about the middle of November it was quite gone.

The child began to feel about the 20th October and for this as usual carbolic oil was prescribed During his convalescence the sickness, which had never entirely ceased, became much worse; the Iodide of Potassium which he had still been taken was given up and various medicines given, but the only one ~~~~ whose administration gave relief was the Liquor Peptonis of Benger.

He left home about the middle of November and has just (7th January) returned The sickness has now quite ceased. Repeated examination has failed to detect any trace of the murmur.

Remarks In this case of S. Simpley, the laryngismus stridulus may have been due to the poison acting on a system predisposed to these attacks, or it may merely have been a coincidence.

The heart murmur was no doubt organic There was also no hypertrophy, no pulsation, no vibration could be felt, but there was a certain amount of cardiac uneasiness; in addition to which the pulse and temperature did not fall, as they ought, about the 5th day. The murmur itself presented a punctuated character. It began as a roughness and prolongation of the 1st sound and after a few days slowly diminished. It did not present any variation in its point of greatest intensity, but it may be said always to have been best heard over the aortic cartilage and down the right side of the sternum.

It may however be urged against its organic character, that it was not permanent, but it is well known that heart murmurs due to

granulations produced by endocardial inflammation, do occasionally disappear. Endocardium in Scarlet pulses run, though Pericardium has been occasionally noticed. Indeed nearly 40 years ago Dr Scott Alison wrote an Essay on Pericardium as a complication and sequela of Scarlet Fever

The Carbuncle of Ammonia was given simply because the pulse was becoming weak; it was alone line landed in endocarditis from its supposed power of preventing the deposition of fibrin.

Schmidt's observations, to some extent forestalled by Dr A. Buchanan have shown that Richardsons views as to the origin of fibrin are erroneous, besides what he "granulations" in Endocarditis are produced by inflammation of the deeper layers of the endocardium, and are not formed by the deposited of fibrin from the blood.

The following is a tabular form of the temperature in this case

	Morning	Evening
Sept 27	99.2	100.1
" 28	99.8	100.6
" 29	101	Not taken
" 30	101.5	101.9
Oct 1st	102.3	102.4
2	102.6	102.4

From the 2nd Oct the there was a gradual fall.

Case J. K

He is the brother of R. K and is aged 2 years. Mrs K could not be induced to part with him, when she sent her daughters from home & so he was soon attacked. His was a case of Scarlatina Anginosa, in which there was much swelling and ulceration of the throat, with a tumour the neck. A solution of permanganate of Potash was applied on a small piece of sponge to the throat, which was also cleansed with hot water. Belladonna and fomentations were applied externally. There never was the slightest, but desquamation took place much as usual. The entire absence of rust, has caused this short mention of his case, because his sister who was next attacked, had the most perfect rust the writer has ever seen.

Case of M. K

This girl aged 13, is the sister of the patients in the 2 former cases. She had been sent from home whenever K. K. was attacked, and did not return back until the 4th of January 1882, which was a period of more than 3 months absence. After the recovery of the two former cases the rooms had been entirely disinfected, all linen and blankets washed in antiseptic solution. The bedding and all other clothes which could not be washed, had been sent to the town's fever hospital where fumigated in the hot air apparatus.

Mrs H also about the 1st of January had gone to another house. It therefore seemed that there could not be the slightest danger in her daughters' return home, yet 3 days after, the disease began again.

On the morning of the 7th January she awoke with a swollen throat, and soon afterwards began to be sick, and complained of a headache together with pains in the back and limbs. The urine was not sent for until the evening, and on his arrival found her complaining of headache, sore throat and sickness. Her tongue was thickly coated with a yellow fur, and the tonsils were already much swollen. Her temperature was not taken but the pulse was 140. Her skin was flushed and felt burning hot, and already there were to be seen on the inside of the arms one or two small vesicles.

Milk and ice were ordered. No internal medicine was given as the sickness was so intense, but a grain of Chloride of Potash was prescribed, and a linseed poultice, and the belladonna ointment were applied externally; in addition to all of which a poultice was placed over the stomach hoping if possible the sickness, and directions were given that she should take a teaspoonful of milk.

8th January. Morning. At this visit she was found to have passed a very restless night, during which delirium of a violent kind had been present. On examination the throat was seen to be much swollen; it was noted that the swelling was bright red and not dusky in character. The rash was already beginning all over the upper arms and trunk, and the pulse was still

120, but already much softer and more compressible
× The temperature had risen slightly, and was 103·7
The diet was continued as before, but as the sickness
was somewhat abated and the temperature was so high
a mixture of carbonate of Ammonia and small doses
of aconite was ordered. Tepid sponging was used
to allay the burning heat of the skin.
Evening. She seemed weaker. The temperature was
however slightly less 103·5, but the pulse was rather
more 130. It was already becoming small and
was very compressible
9th Morning The temperature has again fallen, and
so has the pulse. The former was 102 and the
latter 120, but smaller and weaker. The rash was
continuing to develop, and was by this time almost
universal. The throat was now so much swollen
that the bowels almost met in the ~~beginning~~ middle
and great difficulty was experienced in getting
her to swallow
A sponge dipped in Condy's fluid was passed to
the back of the throat, and this was ordered to be
done several times during the day.
Beef tea and shrimp soup were now ordered, and
a teaspoonful of brandy, in a little water every
two hours, was given.
The Aconite was omitted from the prescription,
and the carbonate of ammonia given alone
Evening She was found to be in much the same
state. The temperature was 104·4 the pulse 130
but so weak that it could only be counted with difficulty
The bowels had been moved in the 7th and they
were again moved to day, and the urine has been
very scanty and high coloured

10th morning. The rash this morning was found to be universal so that the whole body except the face and neck presented a uniform red appearance. The face and neck were not at all affected with the rash but were covered with irregular blotches.

The throat was now found to be deeply ulcerated, and the secretion was purulent and purulent

The general condition was worse for so feeble was the pulse that it could not be counted. The feet and hands felt very cold, but the trunk, which no longer presented to the hand a feeling of burning heat, was moderately warm. The temperature had slightly risen and was 105°

The nurse was urged to try to get her to take more nourishment, as she seemed to be sinking through weakness. The secretion from the throat was frequently cleaned away with the sponge, and the belladonna ointment was thickly smeared over the outside of the throat. ×

3. P.M. No improvement had occurred and she had swallowed almost nothing since morning. Under the circumstances it was deemed necessary to feed her by the nose. Having obtained an ordinary elastic tube from a common feeding bottle, it was inserted into the nostril about 3 inches, after the end had been cut across at its widest. A cupful of milk & brandy were easily given, but she was soon sick; this was probably due to the large quantity given. Fortunately the trained nurse was a most intelligent woman, and after she was once shown how to pass the tube, and allow drink to pass through it slowly, she could manage herself.

Orders were given, that only a little should be given at a time and by this means there was no return of the sickness. Milk, beef tea, and medicine were thus continuously administered

Evening. She was no worse. The temperature was 104.2, and though the pulse was no stronger, yet the hands and feet were not so cold.

She has passed her water in bed to day and does only semi-comatose.

Every night delirium has been present, and despite weakness is occasionally violent

11th Morning. She was rather better. The nurse had given her a considerable quantity of nourishment by the nose. She throughout the last time showed signs of improvement, and desquamation was already beginning in large patches at the groins and inside of the knees. There was a considerable fall in the temperature and the pulse could almost be felt. The temperature was 102.6

Evening. The improvement continued. The pulse could now be counted, and was 130. The temperature was 101. She had swallowed a little once or twice by the mouth, but the most of the nourishment was still taken by the nose

Her bowels were again moved to day, but she had asked for the bed pan. The urine was now for the first time examined and found to contain about a fourth albumen. No tube casts were detected, but renal (?) epithelium, altered and disintegrated and fatty degeneration was seen; amorphous urates were present in abundance.

A draught of 20 grs of Bromide of Potash was given

12th Morning. She was found to be very drowsy, but the pulse was rather stronger. The temperature was now 100. The rash was now daily growing less and soon was quite gone, and the thrush was decidedly less swollen

3 P.M. She was in much the same time, the drowsiness still continuing

10 P.M She was considerably better, and the drowsiness had quite passed off. She had swallowed several times by the mouth to day, and the tube was not any can used. The tongue, which for several days had been dry and brown was now cleaning and the scales was cleaning off from the lips and gums.

On the morning of the 13th the temperature was 99·8, and in a day or two afterwards it soon became normal. She daily gained in strength, but it was soon evident that there was paralysis of both legs In weeks no improvement was visible as regards the legs in spite of galvanism and strychnia At the present time [14 March] nearly 10 weeks since her illness began, she can only just stand. She had during convalescence a slight attack of rheumatism, for which Salicylate of Soda was given with marked improvement.

It is at present proposed that she shall leave home in a few days, in the hope that the change will prove beneficial for the paralysis

Remarks. In this case, an illustration is afforded of the manner, in which Scarlatina sometimes breaks out again, in spite of every precaution. Careful enquiry was made, as to the possibility of her having caught the infection, elsewhere than

at home, but that did not seem at all likely. There was every probability that she had caught the infection somewhere at home, and yet every precaution had been taken. The period of incubation was short; she came home on Wednesday, and she was attacked on Saturday.

It was a case of Scarlatina Anginosa occurring in a weakly girl & producing great and rapid weakness.

The question may be asked; did the acne cause the weakness to any extent whatever? The writer thinks not as she had only 5 doses with 3 m n in each, as it was stopped on the morning of the 3rd day.

It will be noted that the temperature began to fall on the second day, though there was a good rash and much swelling of the throat. There was, however a slight rise on the evening of the 10th

It was interesting to observe in this case, the changes in the pulse. She was not seen during the chill, if there was one. At the first visit the pulse was large, full and not easily compressed, - bounding. Next day, while still large, it became soft, compressible, and diecrotic; shortly afterwards it was small and very compressible, lastly it was so weak, that it could not be counted for 2 days. The reverse of the most of this was seen, when it began gradually to improve.

With reference to the tube passed into the nose. It was easily managed, and its use attended with great benefit but the writer thinks it ought to have been tried the day before.

The paralysis was no doubt due to an oedema of the throat, due to the inefficient manner in

wheet the circulation was for a few days corrected low. In this Strychnin was prescribed, and galvanism used early and persistently; then use for a few weeks however seemed of no avail, but within the last few days a distinct advance has been achieved.

The following gives, the course of the temperature in a tabulus form

	Morning	Evening
Jan. 7th		Not taken
" 8	105··	105·5
" 9	105·2	104·2
10	104·	105··
11	102·6	101·
12	100·	Not taken
13	99·8	" "

and in a few days, I was normal.

In a few days, her sister was also attacked with the fever. Her case was also a case of S. Argyrosis the temperature on the morning of the second day was 106, but very on to full at once. Her throat was not quite so much swollen and she was thus always able to swallow a little, the consequence of which was that she was never so weak, as her sister had been, and her recovery was much more rapid. She was allowed a generous diet, and the throat was treated in a similar manner. Carbonate of Ammonia and acetic were the remedies employed, and iced spraying was frequently applied. Her case was very much like her sisters and fuller details need not be given, but the underpeyets

that her fever chart has been lost.

The Case of M.C. is only of interest because, it was ushered in by a convulsion. Unlike the case of measles, convulsions in Scarlet Fever are rather rare. Bristowe says, "Occurs in adults, in children, convulsions come on early in the disease, they are rarer, however, than at the commencement of measles, a small fry, and are far more serious — indeed are generally followed by a fatal result" The case of M.C. was a part from the convulsion one of the mildest of the whole series; I ought however to be mentioned that in her family, there is a considerable tendency to convulsions in childhood.