This is in very wonderful a valuable work. The
The Annals of Heer.

and one of a clear observation. "The absolute
and available."

in certain forms. It is quite the absolute
have added much value of other combinations.

The comparative value of pure inorganic and organic
the frequency of surgical cures, I have that is derived from its
by comparison with other. The writer does not seem
to refer to that mode of exploitation at all.

April 1879.
On the treatment of Acute Rheumatism
with observations on Salicylate of Soda.

April 1879.

Michaol Holms
Royal Southern Hospital
Liverpool.
Gentlemen,

The treatment of Acute Rheumatism has always been a subject of great interest to the Physician. It is true, although in many cases the disease runs a short uncomplicated course to a favorable termination, yet in number of cases there is no means of predicting the affection in accordance or followed by cardiac lesions, these in time terminating in results disastrous as well. We all know that Rheumatic fever has no well-defined, periodic course as seen in many other diseases of inflammatory or febrile type. Some cases running their course without danger in a few days, whilst others are indefinitely protracted; hence our difficulty in arriving at any satisfactory opinion as to the influence of any particular line of treatment. The various remedies at different times recommended in this disease are perhaps more numerous and of greater diversity than in any other and we doubt the disease has been to an early and satisfactory termination under it in spite of all treatment; but before we can arrive at the true value of any remedial agent in any given disease, we ought carefully to study and gain an accurate knowledge of – the natural history of that disease as seen when running its course uninfluenced by any therapeutical measures. This usually is
A difficult task, seeing that — in the majority of cases — we get constrained in the interest of patients, to consider their individual well-being, belief and to give them the benefit of our past experience rather than by expectant treatment, subject them to rigid clinical experiment. In hospital practice we have greater opportunities of studying the natural history and course of disease than elsewhere. Being that the sick are under good hygienic conditions with the advantage of skilled nursing and careful dietetic treatment, then alone in Acute Rheumatism as in other diseases leading in many cases to a favourable termination. Moreover in hospital we have greater facilities for observation, examination & research.

In this thesis I propose first to consider the natural history of Acute Rheumatism or rather to notice shortly the results attained by Patterson who have watched cases then left to nature uninfluenced by medicines — then the course of the disease under one or two of the more common methods of treatment — noticing the frequency & proportion of Caustic complication with the duration of the disease — finally its history under treatment by Salicylic Acid.
and Salicylate of Soda giving the results of my own observation in cases which have come under my care.

I have noted about 14 such cases of which I have noted sufficient accuracy from a trustworthy basis for comparison.

In 1865 Sir J. H. Dixon subjected a number of patients in the ward of Guy's Hospital to a treatment consisting principally of mild water—The result being that in a series of forty-one unselected cases—25 of which were well marked first attacks—the average duration of acute symptoms—pain, fever, and weakness—under treatment—was in males 13-1 days, females 15-5 days, or together equal to 14-3 days, the average residence being in males 27-6 days, females 26-8 days or together 27-2 days. It is clear the condition of the head on admission was found to be normal. In the whole series headache came on in 4 or about 10 per cent. with pain in 94.

The conclusion here is, that if Drury's treatment was found to be good. Drury's method of treatment for if this conclusion be correct, we shall in many cases have given credit to Drury's treatment—
for having warded off cardiac complications, then the fact is that the time for these lesions had passed, before the action of the remedies had begun.

In 1863 Dr. Austin Flint of New York published thirteen cases in which his principal treatment had been injection of quinine. Largely selected, of these one case became affected with pericarditis, and subsequently with pneumonia — the patient however recovering. Eleven out of the thirteen had "cardiac murmurs." The murmurs being limited to the base of the heart in all but three, as all these except two were women, he lays no stress on this occurrence. Considering that a basic and cardiac murmur is the rule in females of 40 years of age, he concludes — The results show a mean duration from late attack to Convalescence of 26 days. The pericarditis being excluded.

From the observations of these statements it would appear that when the disease was allowed to run to a natural termination, the results were —

- Average duration of acute symptoms after treatment: 14.3 days
- Average Residuum in Hospital: 27.2 days
- Proportion of cardiac complications after admission: 10 per cent.
- Proportion of cardiac complications after discharge: 23 per cent.
In 1862 Dr. Dickinson gave a valuable sketch of the effects of the different treatments of Acute Rheumatism as seen in the wards of St. George's. All were very marked cases; there were no cases with heart complications present on admission. From this paper it appears that in those treated by

I. Vinson's in number, the heart became affected in four or 50 per cent. The average residence was 41 days.

II. Paracry 24 cases gave 6 examples of inflammation of the heart or of its membranes (25 per cent) two of which proved speedily fatal. For the remainder the average residence in hospital was 37 days.

III. Specifics (so-called) 14 cases in all; in half of these none (7) Dover's powder—isonsid of Bismuth, Belladonna or Quinine were administered and the results were peculiarly unsatisfactory. The heart became involved in four of the seven equal to 57.1 per cent and the duration of the illness averaged more than 46 days. Of the frequency of indifferent cases after the treatment by Opium, of which there was only one case in the above Dr. Wilson published some tables in the Association Medical Journal in which 21 cases were recorded when the treatment was commenced, the hearts sounds in all were natural—Opium was given in frequent doses, sometimes as much as every hour. At others combined with remedies said to be useful for less than 14. Of these cases—exactly two-thirds—
or 66 per cent, manifested itself under treatment
the symptoms of vascular or myocardial inflammation
that opium would be unsatisfactory in which he might have
expected 'a priori' seeing that the powerful drug is
known to diminish the action of the abdominal
secretory organs — bowels, kidneys, liver, &c.
In consequence, the skin acting alone being unable
to throw off with sufficient rapidity the rheumatic
virus. And even that may be — much of this would
necessarily be retained in the economy at the risk
of structures for which it seems to have a special
affinity, viz. the heart & its membranes;
return to Dr. Bellman paper. In the remaining half of
the fourteen cases treated with Specifics, Dr. Bellman
was alone given of these 7 only one became
complicated with cardiac mischief and the average
resistance came as low as 27 days
Dr. Bellman in one of the Medical-Chirurgical Society's
Transactions has given cases treated by Bell in large
doses asserted however by other remedies, this
table of 6 cases shows that on admission in the
head was unaffected but in 6 of these a proportion
of about one in eleven or 9.09 per cent — did the
organ become affected under treatment

Salts. There were ten all treated with Salts of Muriate
of Soda in combination with Carbonate or other
acids (vegetable) in less quantities than three drachms in the 24 hours — In all sixty-two cases were so treated, with occasionally other remedies and amongst these seventeen cases of cardiac disease occurred a proportion of one in 3.6 or 27.4 per cent and the duration under treatment—averaged 33 days — from this it appeared that the salicylic treatment had by itself little influence on the course of the disease.

IV Partial Alkaline treatment — In these cases alkaline salts were given in amounts between three and four drachms in the 24 hours & though they did not lessen the frequency of heart complications, yet they appeared to shorten the duration of the disease — In the 17 cases so treated the lead became affected in 6 or 35.3 per cent which is a greater proportion than under the ‘salicylic’ and the average duration of resisence more than 28 days.

V Full Alkaline. Alkaline Salts generally the Bi-carbiate or acetate of Mashed were given in amounts from half to one & a half ounces in the 24 hours — The results in this series were better than in any of the others — 22 cases were thus treated of these none suffered from cardiac affection. Whilst the average resisence came down to twenty-five days — from this it appears that the Carbonates of Mashed
or Soda, with other Salts of these bases, which are converted in the body into Carbonates, exer a beneficial influence over the Scurvy and protect the Structures of the head from inflammatory affection — but in order to effect this important result, they must be exhibited in quantities not less than the amount specified viz. 20 to 30 daily. In 26 cases of full alkaline treatment, with the occasional addition of other Medicinal Coadjuvants, the case of heart complication occurred at the mean residence in hospital was increased by 5 days. The proportion of cardiac lesions in the total number of cases under full alkaline treatment was 35.48 or 2.08 per cent of the mean residence 27.5 days. This result is very good, compared with the other modes of treatment — in all 125 cases, of these heart complications came or in 38 or 30.04 per cent; and Residence = 35.3 days. Next to full alkaline, whilst treatment was most successful, heart complications in this series were in from seven — their lesions were rather worse. In cases treated by 'Pissation' alone, half were affected with cardiac affection. Whilst under quinine the Scurvy ran a most disastrous course, no less than two-thirds being affected with endo- or peri-cardial inflammation.
In 1855 Dr. Sarro read a paper before the Royal Medical & Chirurgical Society giving his experience of large doses of Bicarbonate of Potash in Acute Rheumatism, the treatment being almost nil. The cases were only selected for all admitted into his wards in University College London between May 1852 and January 1853, fifty-one in number were treated. The mode of exhibition was generally Bicarbonate of Potash in 2 per cent Acetic Acid. Every morning, the amount of the salt taken in twenty-four hours being about one ounce. The urine in these cases rapidly became alkaline, pain diminished, and the pulse fell in frequency. His results are as follows:

- From admission until all acute symptoms had subsided an average period of 6.7 days - if from the commencement of attack 13.5 days.
- In no case where the patient had been under influence of treatment forty-eight hours did cardiac complications arise. In one case, there it was coming on at or soon after the admission it was much modified. There are certainly very satisfactory results corroborating the conclusions of Dr. Dickinson & that the treatment by large doses of alkalies, particularly has been the most successful in the alleviation of the prominent symptoms of Rheumatic Fever and in warding off the various complications so often found under other methods of treatment.
Like almost all new drugs, Salicylic Acid - Salicin - and Salicylate of Soda, or first being introduced were very frequently & favorably spoken of, and by some even called Specific in this disease - Since Dr. Macleary's paper in the Lancet March 4th, 1876, the evidence from numerous observers has rapidly accumulated and I think tends to show that in these remedies and in Salicylate of Soda especially, we have thus not a Specific, at all events, a very valuable & powerful agency in curtailing and controlling the effect of the Rheumatic Virus and it behoves us to examine carefully into the therapeutic worth & action of these remedies - While abostr my first impression of Salicylate of Soda were so favourable that I determined to investigate the Subject more carefully on my return home and whilst House Physician to the Royal Southern Hospital, Liverpool. I have - owing to the Kindness of my Physician Mr. Martin - had opportunity of treating a number of cases of well marked Acute Rheumatism most of which were put under Salicylate of Soda, the drug being prescribed generally in fifteen grain doses every hour until the patients were well under the influence of the remedy. Of nineteen of these cases, I have retained notes sufficiently accurate I think, to afford a trustworthy ground work for
Comparison with other and older methods of treatment — among the accompanying cases it will be found that both sexes are represented though males predominate — the age and occupations vary — in fact it was the first attack in others the second or their and in eleven of the nineteen the head was affected on admission.

On coming into the hospital patients were generally placed in a warm part of the wards between blankets, the affected joints were wrapped in bedding, and an aspirin draught — the ordinary Haematuric Syrup — ordered where necessary — the bed was either built alone or with a little rice once a day — on examination of this clinical history it will be seen that in nearly all the cases the temperature rapidly fell to normal; the pain was relieved almost as quickly and in no case did cardinal or chief cause death under observation — in one case only (Case XV) was a doubtful sound heard with the Sphygmomanometer, but the heart sounds were clear the next day. In most cases owing to the manner of administration the physiological effects of the drug markedly supervene — a feeling of lightness in the head with a feeling of tension, then modest or slight in the ears. On comparison with the noise of machinery in motion and in some cases even wheezes and vomiting,

11.
On being asked patients in this condition almost invariably remarked they would much rather have these unpleasant symptoms, than the pain & discomfort experienced before treatment — On suspension of the medicine, the toxic effects soon subsided though in cases where no vomiting occurred, the addition of Bormo-Hydrac acid in 3/4 doses generally sufficed to relieve the headache & tinnitus aurium — Some patients were found more susceptible than others to the action of the remedy and on its suspension, it was often found that a tendency to relapse occurred, as seen by pains shooting from joint to joint, a rise in temperature with a return of the fibrile condition.

On examination of the urine, it was also noted that these symptoms coincided with the absence of traces of Salicylic acid as seen by the addition of a solution of a per cent of iron; but on the medicine being resumed, the articular pains and pyrexia again subsisted. In most cases after the acute symptoms were controlled, the medicine was gradually withdrawn and a tonic prescribed to counteract the liability often seen — (Alcoholic stimulants were seldom needed.) After such increase of diet was ordered — care being taken in returning to animal food, and the patients were retained in hospital until they had regained.
to a considerable extent sufficient health to withstand the toils of the campaign. It is

By the proceeding remarks some of the more general effects of the remedy have been noticed, but it may be well to consider some of the more definite results in greater detail. The Influence on the Temperature. Though the intervals in the different cases, between the date of attack and admission into the hospital varied considerably, namely, from forty to two days, the average being 7.1 days, the temperature had fallen to normal by the first day after admission in 2 cases, by the second day in 6 cases, by the third day in 7, by the fourth day in 2, by the fifth day in 2 and by the eighth day in one case. The average being 3 days. This rapid decline was almost invariable and proved permanent where the drug was continued in doses sufficiently large to be found in the urine. In cases where the medicine has been abruptly suspended, either on account of sickness, head symptoms, or merely for experiment, I have often noticed a corresponding rise in the temperature, with a return of acute symptoms, and on resuming the treatment the temperature again became normal — as in Case XIV where the slight return of pain and elevation of temperature was noted — these subsiding however on the second day after re-commencing the Schedule of Soothing
II. Influence on the Pulse.

The pulse was seldom found to be rapid on admission, in three cases only did it reach 120 beats per minute, in one 115, in three others 110 per minute, but in all a fall in the frequency of the pulse corresponded with the decline in temperature occurred. In several cases when the remedy was administered for some time, the pulse became reduced in strength and in frequency fell below normal — it only rose when the Salicylate was withdrawn and a tonic treatment substituted, from which it appeared that the Salicylate had the effect of depressing not only the frequency but also the force of the heart's action — and diminishing vascular tension.

III. Influence on Pain.

The subsidence of pain in most cases was as marked as the fall in temperature — often after one or two doses patients expressed themselves as feeling much relieved & better — in four cases all pain had disappeared by the 1st day after admission; in three cases by the 2nd day; in four by the 3rd day; in four cases by the 4th day; in one by the 5th; and in three by the 6th day. Giving an average duration of pain after the treatment had commenced of 3.2 days.
Influence on the Heart. Of the nineteen cases subjected to the above treatment, eight were admitted free from Cardiac complication, and all three remained free from such until under observation. In one case only was there any doubt that uncertainty was removed on the following morning. Of the remaining eleven which were affected before admission—i.e., four the heart sounds became normal, that organ completely recovering itself before the patients were discharged, but in seven structural lesion were present on leaving the hospital, though in some considerably modified during the period of treatment.

From this it appears that in no case where the heart was unaffected on admission did sedo- or peri-cardial inflammation ensue.

Influence on the Stomach. In eight cases owing to the medicine at first being given at such short intervals—viz. every hour generally—vomiting ensued, but was easily subsided, for on omission of the salt, no further trouble occurred. In a few cases nausea was produced whilst in others the stomach did not seem to resent the ingestion of the drug in the slightest degree. The tongue generally became clean and moist as the acute symptoms decreased in intensity.
II Influence on the Skin.

In thirteen cases it is stated that profuse sweating occurred after the administration of the salicylate, though in none of these the skin had been dry before coming into hospital. In five cases the condition of the skin has not been noted. In one however it is remarked that there had been no sweating since the medicine was commenced. From this it would appear that if the remedy has not the effect of increasing the action of the skin, it does not add to its excretory power. That profuse sweats is generally followed is this common sense. In some cases a copious, though not excessive, sweat was often observed, occasionally becoming profuse, but in no case could any trace of salicylic acid be found in the sweat though repeatedly collected.

The influence on the urine frequently the urine was often diminished, probably from the amount of water thrown out by the skin and the specific gravity correspondingly increased. Urine was generally thrown down in thick drops and though sometimes of a pink colour were in most cases pale. A trace of albumen was occasionally found, as in Case I, during the Stage of pyrexia of fever it is due to the temporary hyperacemic condition of the kidneys rather than to any special action of the salicylate. The elimination of salicylic acid would begin very soon after.
injection for in Case XVIII a boy of eleven years, traces of
the drug were found in the urine, fifteen minutes after
the first dose of the medicine had been taken. In a
patient whose kidneys were also healthy, a dose of fifteen
grains of Salicylate of Soda was given at 3:10 p.m.,
(before dinner) at 3:20 there was no trace in the urine
at 3:45 trace at 4:20 (excrions) at 10 the following
morning decreasing; at 3:10 p.m. slight trace and
at 4:20 p.m. no trace showing that when the kidneys
were healthy elimination commenced in about 36
minutes and in 24 hours was completed.
In a case of "Waxy Kidney" 15 grains of Salicylate were
given at 5:40 p.m. in the urine passed at 6 p.m.
there was no trace but at 6:20 the urine then passed
had a distinct purple reaction with the solution of
perchloride of iron at 5:30 the next morning the
amount of acid in the urine was "excrions": at
1 p.m. "trace" at 5 p.m. a trace & at 9:30 p.m. no trace.
In this case the elimination of 15 grains of the Soda
salt was begun in within 45 minutes and completed
in less than 28 hours. In another case where the
patient had been taking the remedy for eight days
it was nearly all eliminated in 12 hours and in
twenty hours all trace had disappeared. In
another case where sixty grains had been taken
Seventy for four days, ten hours sufficient to eliminate
In Case XVII the first trace was seen seventy-five hours after the last dose of the medicine. From this it would appear that the

minimum time before traces appeared in the urine was 15 minutes,

maximum 48 minutes.

Minimum time before traces disappeared from urine was 18 hours,

maximum 77 hours.

Traces of the acid may also be found in the Breast of Children.

VIII Influence on Secretion of Milk

If the mouth be carefully washed out and rinsed some hours after taking the medicine, the Saline collector will yield the characteristic reaction with the iron solution, though in small quantities. As to the secretion of the mammary glands I have never been able to obtain even the faintest trace of Salicylic acid. Case II was that of a married woman who was brought into hospital with her child at the breast. The disease ran a short course during the whole of which she suckled her infant. No trace of the acid being found in the milk, though a drop of urine added to the fluid immediately turned blue a few seconds aftercloud with FeCl₃. In another case a woman nursed her child during an attack of acute
Rheumatism, the whole course of which the child suffered from diarrhoea, but as no trace of the acid could ever be found in the milk, it was considered that the diarrhoea had arisen from other causes.

IX. Influence on the Nervous System. The most marked nervous symptoms noticed have been first palps, a feeling of tension in the brain, with humming and singing in the ear, sometimes musical, at others a sound like machinery in motion — occasionally headache was complained of — these symptoms however soon subsided on suspension of the salicylate. Once or twice an indefinite restlessness was seen in mild form of delirium, the patient trying to get out of bed and take the wood and bandages from the joints at the same entirely free from pain. In the majority of cases, the quick relief from suffering was followed by sleep, sound and prolonged.

From a perusal of the foregoing observations and the cases afterwards given in detail, it will be seen that both the Salicylic Acid and the Salicylate of Soda were used, but preference was given to the latter on account of its more ready solubility and less tendency to produce gastric irritation and the greater rapidity with which pain subsided under the Soda Salt than under the acid. The patients who appeared...
to derive most benefit from this treatment were those with well marked symptoms — high temperature, acute pain — with swelling and redness of the joints. In these the relief was most speedy, but although the pain + pyrexia subsides in the first few days, in some the swelling of the joints and foul condition of the tongue remains for some time.

The highest temperature reached was in Case XIX that of a robust female. 105.4°F was registered the evening of admission, a bath was held in plainsness in case the fever increased, but as this began to diminish after an extra dose of the Soda Salt no active treatment was required — that case of higher pyrexia so occurs under Salicylate. I may mention that in July last a man was admitted named D.Cameron in which the temperature at first was 100. The patient was not very ill & the Petroleum Ammonia, Acetata was prescribed. By the 5th, the fever gradually increased for three days when Salicylate of Soda was ordered in 10 grain doses every 3 hours, the next day, skin had returned except on motion, patient had slept a little & had slight headache, but no vomiting. On the following day his temperature had fallen from 102.4°F to 98°F pulse 70 & respirations 20 per minute & he had no pain at all, but he was sick after the medicine did not sleep during the night and was delirious.
Temperature Whilst in Bath

Name: Louis Brayman Age 40 Disease: Acute Rheumatism

Temperature

Date of Dis.
Resp. 32 28 24 18
Pulse. 104 92 80 78

August 6 1878
August 7 1878
August 27 1878
The Saffyplage was then omitted on account of the nervous symptoms and the mixture Irvine prescribes I give three times a day. The same evening he became worse and his temperature gradually rose until early morning. Then it quickly reached 107.2° at this point the man was placed in a warm bath to which cold water was gradually added and his temperature brought down to 100°6 after 35 minutes immersion. The cooling still continued after the patient was replaced in his until after two hours his temperature was 98.4°, after this it again rose to 102°9 hours it has reached 105.4° at this time the bath was repeated with similar results the temperature again rose, vacillated between 101°4-103° for several days then came down; but twenty days afterward a relapse occurred and the temperature reached 104°, the bath was again given and the fever reduced — after this the man made a slow recovery having chronic pains for weeks, but ultimately was discharged cured after 65 days residence.

From these and other observations I have been led to consider, that the Saffyplage is a though not a specific in acute Rheumatism is certainly superior to other remedies — even the full alkaline treatment — and I think most observers agree that the fall in temperature and relief from pain
are most remarkable, occurring as they do in nearly all cases so treated — at the present time we have two cases of acute Rheumatism in the Hospital under this treatment, in one the temperature 104.6 on admission was normal on the 2nd day after and pain gone by the third; in the other the temperature 103.8 on admission was normal on the 3rd day and all pain gone the same night which agrees with the results given in the 19 case, appended.

As to the mode of administration I think that the more rapidly the physiological effects are produced the sooner more certainly are the good results obtained — fifteen grains of the soda salt may be given every hour for 6 hours or until tension & swelling of the skin are produced, then the drug may be given less frequently and gradually withdrawn, a tonic treatment being substituted, still giving sufficient saline salt to affect the urine — or a relapse may occur.

Another good result is the freedom from cardiac complications under this form of treatment, the case of endo- or peri-carditis occurring in the cases I have watched — this really being the most important object of treatment, when we consider the disastrous consequences of valvular lesions of the heart and the sufferings caused thereby.
# Table I

19 Cases treated by Salicylic Acid or Salicylate of Soda.

<table>
<thead>
<tr>
<th>Case</th>
<th>Symptoms</th>
<th>Dosage</th>
<th>Temperature</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td></td>
<td></td>
<td>103°</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td></td>
<td></td>
<td>102°</td>
<td></td>
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<tr>
<td>III</td>
<td></td>
<td></td>
<td>100°</td>
<td></td>
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<tr>
<td>IV</td>
<td></td>
<td></td>
<td>102°</td>
<td></td>
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<tr>
<td>V</td>
<td></td>
<td></td>
<td>101°</td>
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<tr>
<td>VI</td>
<td></td>
<td></td>
<td>100°</td>
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<td>VII</td>
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<td></td>
<td>101°</td>
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<td>VIII</td>
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<td>100°</td>
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<td>XVI</td>
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<td>102°</td>
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<tr>
<td>XVII</td>
<td></td>
<td></td>
<td>102°</td>
<td></td>
</tr>
<tr>
<td>XVIII</td>
<td></td>
<td></td>
<td>105°</td>
<td></td>
</tr>
<tr>
<td>XIX</td>
<td></td>
<td></td>
<td>104°</td>
<td></td>
</tr>
</tbody>
</table>
In this table there are 19 cases noted, which on analysis show an average duration of illness before admission of 9.1 days — Acute Symptoms under treatment 14 days — Convalescence 16.4 days and Readiness 20 days —

In eleven the brain was affected at admission, but in 4 of these the complication subsided whilst under observation. The remaining seven left the hospital with residual lesions, though in some less marked than on admission.

In eight the heart was unaffected and remained free during the whole course of treatment.

**Table II**

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Heart Complications</th>
<th>Readiness</th>
<th>Fatal.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Specifics (Scalpel)</td>
<td>57.1 percent</td>
<td>46 days</td>
<td>0 out 7</td>
</tr>
<tr>
<td>2. Vaccination</td>
<td>50.1 p.c.</td>
<td>41 days</td>
<td>0 out 8</td>
</tr>
<tr>
<td>3. Partial Alkaline</td>
<td>35.3 p.c.</td>
<td>28 days</td>
<td>0 out 17</td>
</tr>
<tr>
<td>4. Saline</td>
<td>27.4 p.c.</td>
<td>33 days</td>
<td>0 out 62</td>
</tr>
<tr>
<td>5. Mercury</td>
<td>25.1 p.c.</td>
<td>37 days</td>
<td>2 out 24</td>
</tr>
<tr>
<td>6. Potassium Chloride</td>
<td>14.3 p.c.</td>
<td>27 days</td>
<td>0 out 7</td>
</tr>
<tr>
<td>7. Injectant</td>
<td>10.1 p.c.</td>
<td>27.2 days</td>
<td>0 out 15</td>
</tr>
<tr>
<td>8. Full Alkaline</td>
<td>2.08 p.c.</td>
<td>27.5 days</td>
<td>0 out 48</td>
</tr>
<tr>
<td>9. Salicylate</td>
<td>0.1 p.c.</td>
<td>20 days</td>
<td>0 out 19</td>
</tr>
</tbody>
</table>

**Comparative Table.**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Duration of acute symptoms</th>
<th>From commencing</th>
<th>Year.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expectant Treatment</td>
<td>14.3 days</td>
<td>17 days</td>
<td></td>
</tr>
<tr>
<td>Sperm (alkaline)</td>
<td>6.7 days</td>
<td>13.3 days</td>
<td></td>
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<tr>
<td>Salicylate treatment</td>
<td>4.0 days</td>
<td>11.2 days</td>
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</table>

(Excluding Age XI)
Appendix of Cases.
Case I  Catherine O'Sullivan, age 34, married, Feb 22. Attack 3 days.

Patient has been acting for about 2 weeks with pains shooting about the neck & shoulders. Her last 2 previous attacks, the 1st 6 years ago lasting 4 weeks & the second, 7 years ago lasting 3 weeks. Her generally enjoys good health, with occasional palpitation.

Three days ago she was attacked with swelling, feverishness, pain all over shifting from one joint to another. Body slightly in advance. Patient perspiring slightly. Tongue dry coated with a dirty brown fur. Knees red & swollen, very painful to touch or in movement. Other joints red & swollen. Heart action tachycardic & a loud mitral systolic murmur heard. P97 T1103 lungs normal. Sinus headache considerable. Heart & acrid sputum.

P. Side satyred for XV Night Comm. And 3 1/2 Every hour for 6 hours then every 2 hours.

Note T102.4 P95 Respirations 32.

23 Began medicine at 6 pm. After 3 1/2 she experiences much relief. Patient was able to lie on right side. During night 10th course was taken - T99.8 P92 R25 - Pistol 3 hours.

Note T98.7 P85 R21.

24 Same commences sleeping after 6 1/2 hour. No pain today. T99.4 P90 R23 - & sweating profusely - Said not to have passed urine, but bowel open daily. Sore in head & ears much less - Comited at 5 am of the mixture but not after next dose. Urine 10.27 Acid - trace of albumen. Abdominal joint.

Prescribe T99.8 P85 R20

26 Remains entirely free from pain. Tongue still dry. Sore
in head like an 'expire' but less than yesterday T98.6 P73 R19

19th Feb T98.6 P74 R18 - S quite comfortable, much better this morning.

20th Feb Still a little Sore. Virtual cure of same character as before -

Urine - Thick bright & pale water - trace of albumin T99.768R

Feb 21 Temp. 98.8 P64 R36.

Feb 24 Vomited after last 25c. of medicines & had acidity of stomach.

Bread & milk. R asked cuisine 3y (yr) tea in sick T98.4

Feb 25 Quite well - T98. P36 - R16.

Marking improved.Continues - Excit.

Note: In this Case the Duration of attack before admission is 6 to 8 Days

The Temperature was normal on 1st day after 9th day from 99.5 to 96.
Pulse came down from 99 to 86. Brand of medicine -

Medicine caused Vomiting & acidity of stomach, showing

Duration of acute symptoms under treatment was 5 Days.

Recovery 18 Days. Total Duration of attack 18 Days.
Case I
Catherine O'Brien
234 - 3rd attack

Case II
Mary Daly
212 - 1st attack

Temperature

Date of Dis
Resp. 4 5 6 7 8 9 10 5 6 7 8 9 10 11 12 13 14
Thise. 22 23 24 25 26 27 28 12 13 14 15 16 17 18 19 20 21

Date
Case II

Francis W. Allen, 61, Paperworker. Mar 12 - 5 days.
Patient during last 3 weeks has suffered from starting pain in all her joints & has been unable to work - 5 days ago, she fell faint & took to bed - Pain became rapidly worse & she persisted feebly - This is the 7th attack.
On admission Patient in coma with a profound infection.
Both knees an red swollen painful & touch, slurred & wisper the same right wrist being very acutely painful - Tongue moist & purulent - Xylen 2 days ago - Head sounds normal & submaxillae not increased - Urine healthy.
T99 P74 R14 11:40 a.m.
R. Post Satisfactory
X-ray Clampl.
By every hour of urino.

X-ray T62 P10 R29 (6 p.m.)
T62 (8 p.m.) perspiring freely.

Mar 13.
Nur in 12 hours 86.89, very pale, inattentive, acid odor, bowels.
Hardly kept at all bedding especially all night.
Bowel & urine twice administered.

Satisfactory, T99.5 at 1:40 a.m. T99.4 P106 R27 9 a.m.

Her now pain at all -

T98. P102 R25 (3 p.m.) 6 p.m. T98.4 P104 R27 Midnight T101.

For 14.
Nur in 12 hours has buringing in head & Soring of ears.
Vomited twice last night - once taken morning sweater properly, Soring night but had no pain. 5 a.m. removed.
T98.6 P105 R26
Midnight Head Soreness

10 a.m.


12 a.m.

Nur in 10 p.m. 12 hours, vomited second time. 5 a.m. Soring.
No head symptoms. No pain.
Boards moved T99.2.

Note, T98.2 P97. R23.
For 16 Today her voice is heard + in sky - otherwise well -

For 17 Depress less - N B Head clear.

For 19 Meas 24 oz in 12 hours - Prnt tea in die. Head sounds clear.

For 20 Feels quite well - Up a little - Head sounds clear.

For 21 Meas 36 oz in 12 hours, slightly tender 10.19 a.m. as always.

Duration: admitted 9 a.m. to 4 p.m.

Duration of acute symptoms under treatment: 4 days.

Residence: 11 days.

Duration of attack: 16 days.

Note: In this Case the Duration before admission was 5 days.

The Temperature was normal on the 4th. Pain from 1st day after pulse fell from 110 down to 72. No bruit or on after admission. Vomited after medicine. This patient was admitted with her baby of 3 weeks 9 m. no Salicylic acid was seen found in her milk. The baby was allowed to suckle during the Whole course. The ordinary milk diet of the hospital was increased by 2 pints of milk daily.

Duration of acute symptoms under treatment: 4 days.

Residence: 11 days.

Duration of attack: 16 days.
Case III. Mary Sedan, 62 years, White, Woman, Feb. 8 - 1 week.

Patient has been ill 1 week. First the back swelling of a 1st ankle Then pain in all joints. Helped somewhat. Has not slept for 2 nights. This is the 2nd attack, 1st occurred 6 years ago when she was in a hospital for 7 weeks.

On admission, 1st ankle, help, 1st knee, very painful on pressure or movement. Skin moist. Tongue clean moist. Bowels constipated. Has had multiple urin.

(Systolic) T. 100.6 P. 28 R. 28 — Note T. 100.2 P. 100 R. 28

R. Sox Salicylated 1/2 X in water every hour for 6 hours then every 2 hours. Head Swollen 3 x b. stat. — Cotton and wound joined.

Feb 9: Felt feverish in evening. T. 98.4 F. 98.2 R. 26 Felt excruciating pains from pains in.


R. Hard. Bruised. Hydrad 3 x a. q. d. b. q. for 2 days every 4 hours.

Between Salicylate every 4 hours — T. 99 F. 92 R. 20

Note: Patient is head much the same, but Somnif. 1 2/4 T. 98.4


Feb 12: Still a little stiff, 1 has slight motion in head. Sleep well all night.

Feb 13: Very Cephalic. Sleep 1/2 hour after dinner for the rest of.

Fell quite well but for slight aching pain in right patella.

Abid. Hematocrit. Bruised. Hydri 1/2 x a. q. d. b. q. Salicylate twice daily — T. 2 x 1/2 in. patella — 3 x 1/2 in.

Feb 20: Bowels not open for 4 days. Nausea all day. To set up.

Abid. Hematocrit. Salicylate. P. 2 x 1/2 in. patella X 2 x 2/3 in. 3 x 1/2 in.
Feb 25. — Feb, quite well —

Mar 1. — Exit —

Note. In this case secretion before admission was 7 days. The temperature was normal on the 4th day & ran from 37 deg after. Pulse fell from 100 to 70. Breast on admission. Patient vomited & felt bad. After 1st dose of salicylate these were found in the urine in 40 minutes & on stopping the medicine Feb 20th all was eliminated in about 24 hours.

Duration of acute symptoms under treatment 4 days. Breast congestion 22 days. — Total duration of attack 29 days.
Case III
Mary Garan
ol. 22 - 2nd attack

Case III
Alexander Campbell
ol. 45 - 1st attack

Temperature

Date
8 9 10 11 12 13

Respiration
9 8 9 8 7 6 5

Pulse
9 8 7 6 5 4 3

Date
8 9 10 11 12 13

Case III

Case IV
Case IV  Alexander Campbell 4454  Scaman  March 8.  Two days ago patient was quite well 2 days ago when he met with an accident and was admitted into hospital suffering from a contusion. That same evening pains came on first in knees then wrists & all joints - the knees & wrists & ankles being bothered. Very painful T 101.6. On the morning of the third day temperature was 100.6  the next day Salicylic acid for X every 3 hours for 12 hours Evening Temp 102.4 P 92 R 32

March 8 Transfered for medical treatment T 107 P R 95 R 35
R Salicylate for XV cap at 3 if every hour for 8 hours then every second hour - Ev Temp 103.6 P R 105 20

3rd day Sweating very profusely T 99.7 P 84 R 26 Pains in joints still very severe  Temp section 50 22 - Heart sounds healthy & was better in before admission slightly  felt much noise in head - Bowels not open since admission. The Salvia was often as one of the remedy will cause a faint reaction with 1/2 12. The mouth was then carefully washed with water & again Salvia cause a faint reaction

English Cathartic 4 x 1/2 inch to each knee Ev Temp 100
March 10 T 98.5 P 78 R 22 Right bladder very well  left most sensitive to & sleeping quietly (10.30 am) Head Swollen 3/4  Bowel Open Ev Temp 99.8 P 96 R 18
March 11 Yesterday head swelling isfabs but today they are quite clear T 98.4 P 64 R 18 Has no pain when he lies still Bowels remain firm - Vomits T 99 P 62 R 18
March 12 Bowels move freely  no pain  still clear T 98.4
Mitch 3/4 tea in bed
March 13  Temp 96.8 P 86 R 18. Fells quite well.

R 7 Ferri Drops Bij Mist lumina 3/4 (8pr) Calf Gall. 1/4 tis Sec.

Salicylate 3/4 twice a day.

March 18 Had chills the morning after being up, but no fever.

March 23 Has stiffness of knees - left side affected.

April 1 Has pain in right eye and in right lumber region - painfully.

April 5 - Speech - well.

Note: In this case the duration before admission was 2 days. The fever was normal on the 3rd or 4th day of the pain, gone by the 6th day after admission. Pulse fell from 100 to 68.

There was no cardiac affection, vomiting. Had markedly cured.

Duration of acute symptoms under treatment - was 6 days.

Residence 28 days + Total duration of attack 30 days.
Case V Thomas Fleming 56 yrs. Ship Painter 1914. 60 yrs.  
Patient looks strong and healthy. Has had several attacks of Rheumatism. Has one of Rheumatic fever 12 yrs. ago. This illness came on 10 yrs. ago after getting cold. Has felt less chilly. Has had occasional shooting pains in knees ankles of feet toes. These joints are now swollen red, right thigh also. Has lost all on right side. No constant pain in thigh. No sweats at night. Tongue moist but firm. Sensation of heart normal. Tqg.8 Pqg. 84 Rqg. 

Nov 1 Tqg.8 Pqg. 84 Rqg. Venus protein, firm and firm. 

Nov 2 Tqg.8 Pqg. 84 Rqg. Venus firmer. Firming and a bit dry. 

Nov 4 Tqg.8 Had a bad night but isless in the morning. 


Nov 6 Tqg.8 Pqg. 84 Rqg. Much better. Has a better night. Pain less. Only has occasional shooting pains. 

Nov 7 Tqg.8 Pqg. 84 Rqg. No pain at all, but feels stiff. 

Nov 13 Had? pain 2 days. Feels well after relief yesterday. 

Nov 14 Discharged. Can not —
Note: In this case, Salicylic Acid was given 10 grains every third hour. Duration before admission was 10 days. Temperature was normal on the 3rd day of being taken by the 4th day after. Pulse fell from 96 to 32. Patient had headache but no vomiting. Increased affection. Duration of acute symptoms under treatment 4 days. Residence 21 days. Duration of attack 31 days.
Case III — Thomas Casey, 22yrs, Laborer Nov 12th
Patient had an attack of Rheumatic fever 3 years ago, then lasting 4 weeks. He has not been well for 8 weeks, has had Rheumatic pains in shoulders and arms. 4 days ago, after night work, he had pains followed by sweating of pains in joints. Bowels open daily

On admission, T 99.1 P 86 R 26 Torque normal. Clean. Sweating moderately. Has pain in left shoulder and wrist and left the right knee but not very severe. Most pain is on pressure over the left wrist which is much swollen and red. Bowels moved yesterday. Epistaxis prolonged accompanied by a maximum soft blowing sound. P 86 Sec. Sitting for 2

Force: T 101.3 P 90 R 26

Nov 13 — Slept well, pain less, had fits of inclination to vomit after ascending. Has palsy in sees & buzzing in head T 99.4 P 88 R 24

Satellite every 4 hours

Nov 15 — Has symptoms less. No pain. Vomited once
T 99. P 56

Force: (9am) T 98 P 50 R 30. Bowels open

Nov 16 (10am) T 97.4 P 52 R 24

Nov 17 (10am) T 98.6 Felt very well except for buzzing in ears, P 88

Nov 18 — Head clearer. Has a few poppet sensations over head & chest.

Nov 20 — Had 2 stools. Life today —

Nov 21 — Diffuse vesicular eruption on limbs & body, each vesicle itchy. All vesicles burst

Nov 24 — Eased — well —
Case VII. John Ritchie 2140 Semin. Feb 6 31 week

Patient has been ailing a week. Took cold at first. Bowsels open
yesterday. Complaint of Severe Rheumatic pains in large
joints. Knees are swollen but move freely. T44.2 P120 R16
Skin dry. T4.9 S. Sore slightly posteriorly to left knee @3.
Every hour for three days then every 2 hours.
Note T102 P118 R18. Skin moist.

Feb 7
T44 P16 P100 Slept pretty well & pain eased by morning.
Note T100 P106 R16

Feb 8
Only feels pain in elbows & forearms when lying still. T98 P92 R16
Has hanging in sweat & feels Slight fever. Bronchial c. 3 q. Ske
Every hours with Salicylate. Note T97.6 P80 R16

Feb 9
Had hot last night but clear this morning. Bowsels open.

Feb 11
David Acemita. wrist ten in Sia. Has a little pain < Slight

Feb 13
Aching pain in right knee — Apply the cald —
14. Pain in right knee of left shoulder — Dust Calendulae 3 x 1
16. Cold to wrists — Up to day —
20. Sore to left shoulder 6 x 3 — Dust Acemita.

Feb 26
First stiffness in joints, pain in shoulder — Dust Warm Salicyl
A dose Sanguis Oj. daily —

Feb 28
Hot bath nightly —
2. Still has stiffness & Shooting pains in different joints
If tin Bellemore, Aloe. com. & Acemita 3 x 3 t unin
7. Feels better — Dust Sanguis. Repeat with Potassii Lodii
14. Vaporum bath daily —
March 27  Haematuria right wrist. Mid back Allantois Lodi.

R.  Forehead for T. Aglaune 5 by  every 2 hours. Abdomination.

March 28  Mid back every 4 hours. Pain the same. Soreness in ears began
after the 5th dose

March 29  Pain in chest

March 31st  Mift 6 th knees.

April 1  Soreness in arms in knees nearly all gone. Pain only in hip & back.

April 4  Feel quite well. Sore.

Note: In this case the duration before admission was 1 week.
The temperature was normal on the 2nd day after the
pain gone by the 5th. But chronic aching pains
lingering about for about 5-6 days. The pulse fell
from 120 to 60. No certain trend. No vomiting
but patient had soreness in ears & ankles in the head.
Duration of acute symptoms  5 days. Residual 6-8 days.
Total duration of attack  63 days.

A slight cough after working in cold water felt unwell, had
shivering - then pain in ankles & in left wrist, is a pale &
light-looking man - Bowels regular - Tongue moist -
has had one previous attack - Systolic bruit at apex -

Reduction:

T 100.6 P 88 R 28 Left ankle & wrist very
gangrenous - Middle finger of left hand the same, feels very thinly
of skin in wound - R Sodic Schiglet & T 4 Ag 5. Every bone problem.

Dec 14 Touch the hand is yesterday - Swells profoundly all night -
Slept pretty well Medicine was continued freeway night - 10th being last day

Dec 15 Temp 2.792 (930 am) At 8 am - Says he is much better - Can
move his arms & legs about anywhere. No pain, feet & hands.

Dec 16 BPIt 4.72

Dec 17 Felt stronger No pain - slept well - Died 6 thous.

Dec 19 Died inside R F. Influenza Ag 4.07 Bits 0 8.

Dec 27 Died - Caused -

Note: In this case the duration before admission was 2 weeks.
The temperature was normal the 2 days after & pain gone by
the 2nd day. Pulse fell from 92 to 79 - Bruit audible.

Patient Vomites but has no head symptoms. Duration
of acute symptoms after treatment was 2 days, Readiness
14 days - Total duration of attack 28 days -
After having patient had a relief & came into hospital
against January 7th as Case VIII.
Jan 17. High Stiffness in back neck. Soreness, pain, pain in tendons
18. Tingling, numbing in feet. Headache. Pain in tendons
P in left knee. P in left elbow.


24. No pain.

25. Stiffness in knees.

27. Stiffness in knees.

28. Stiffness in knees.

Feb 3. Discharged cured.

Note: In this case, sweating before admission was 6 days. Temperature was normal on 2nd day. Pain in foot by 4th day after admission. Pulse fell from 85 to 64. Headache. No vomiting. No coughing. No sweating. No acute symptoms. No treatment. 4 days. Blisters 25 days. Total sweating 1 attack 31 days.
Case H. John Mullins, aged 37 Present. I am 9 to 6 Saps. This is the fifth attack of rheumatism, but never had rheumatic fever. This illness came on 6 days ago after exposure to wet feet. Is not subject to sore throat, never had syphilis or gonorrhea. On admission Complaint of pain in right wrist & at knee. The left knee is swollen & red. Has no pain in other joints. Tongue is furred but moist. Bowels regular. Has no pain in chest. Remains the same when previously affected with rheumatism T 100.6 P 86 R 26. Sputum very clear & frothy. Heart sounds clear. abdomen normal. Pulse 82. Systolic 40 Diastolic 70. Every hour.

Note T 100.6 P 84 R 22.


Day 12 Still Saps. Has a little pain in left knee but much worse else. T 98.4

Pupil 3 to hour

Day 13 No pain. Feeling comfortable

In this case the duration before admission was 10 days. The tender secretion was normal on the 2nd day after. Pain greatly 2 days after admission. Pulse fell from 90 to 60. No sleep. No vomiting. Bed patient had a burning in throat. No sore or head symptoms. Duration of acute symptoms after treatment 2 days. Residuum 60. Duration of attack 16 days.
Case X  Thomas Bennett 24  2nd mate  Feb 10 Days

Tore all 10 days ago after bad weather at sea. Had pain in knees and calves of left leg, spreading from hips downward till joint. Constantly moving from one joint to another. Occasionally had slight pain in shoulders. At first became very febrile. Thirsty. Had no appetite. Knees and ankles very much swollen but not redness. Had no pain in chest but slept difficultly in breathing. But no sleep last night.


Feb 8. Has a bad night on account of pain in right leg, especially at the knee. Has pain of a burning character in throat after medicine. (Previous attacks tonsillitis) Has had no sweating since he commenced mixture. T 100 P 72

Urine 1023 Slight acid Print=albumen. Cholesterol abundant. Deposit reddish brick color. Evening T 99.4

T 98.4 P 60 Evening T 98.4


David Mill R. Dr Ferri. Been up. Tongue clean and red. 2 F 7.5 E 7.8


March 23. No pain except in right upper arm, sleep well. Temp: 98.5°F.

Sweating moderately. Swelling of legs & feet much less. Tongue has

thin white film. Bruit can be heard. — E.T. Temp 98.6

Mid. Every 3-5 hours

24. T 98.6. Tongue clear. Skin remains moist. Has no pain

even on movement. Urine & F. C. G. fine. Hiss pulse close

to 72. Suffered yesterday.

Mid. 45 hours

26. Complains of feeling pain in both knees & anterior shin bones.

Tongue clean & moist. Sleep well. Held much sweating now.

Morning was omitted last night on account of sickness.

A. Phenicellus applied to chin gave no relief. Colour

Hand: Scone Red.

27. P 98. No pain. Feels well. Tongue clean & moist

Bruit: Mixture


A. Phenicellus twice. A. B. Sit. 3 to S. I.

31. Discharged well.

— The bruit

Note: Treatment before admission was 6 weeks. Typhus was

removed on the 3rd day. Pain the 3rd day after admission.

Pulse fell from 120 to 78. — Bruit not admitted for 3 weeks. Sick

Patient vomiting. Duration of treatment 3 days.

Residence 10 days. Total duration of attack 52 days.
<table>
<thead>
<tr>
<th>Case</th>
<th>Name</th>
<th>Age</th>
<th>Disease</th>
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<tbody>
<tr>
<td>X</td>
<td>Thomas Barrett</td>
<td>24</td>
<td>1st attack</td>
</tr>
<tr>
<td>XI</td>
<td>Thomas Parker</td>
<td>35</td>
<td>1st attack</td>
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<tr>
<td>XII</td>
<td>Mary Murray</td>
<td>14</td>
<td>2nd attack</td>
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<thead>
<tr>
<th>Date of Dis.</th>
<th>Resp.</th>
<th>Pulse</th>
<th>Date</th>
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<tr>
<td>10</td>
<td>22</td>
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<table>
<thead>
<tr>
<th>Temperature</th>
<th>Case X</th>
<th>Case XI</th>
<th>Case XII</th>
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<td>Date</td>
<td>43</td>
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*Note: The chart shows temperature readings and other medical observations for the indicated cases.*
Note: In this case, the patient was admitted suffering from a relapse only having left the hospital 71 days before - Christmas time.

The duration before admission was 2 days. The temperature was normal on the 25th day after the pain of the 1st day. Pulse fell from 86 to 72. Bradycardia. Differed from nausea and diarrhea - Duration six to eight symptoms under treatment 2 days. Admitted 15 July 18__ Section 17.
Case XI  Thomas Foster  age 35 Painter  March 21 - Gout  
Patient first noticed pain after which pains came on bed feeling in sole of foot, knees, hips, thighs, in shoulders, back of neck, hands, elbows, and small of back. All these joints became swollen but not redness. This is the 1st attack.

Psorin in the knees are now the only joints affected.

Pain is so bad as to prevent sleep. Has cold hands, with painful sensation of fingers. Cold pains are worse at night. Does not sweat much. Fever has preceded or followed, but never had one before. Lips are much described. Has had no puffiness about eyes. Nor so he get up at night to urinate.

Mucus normal. Bowels moved 2 days ago. Tongue clean. Throat is very pale. Has pains in both knee joints. 2 years ago 4 tons in muscular tisue. 

Temperature T 101.6 P 120 R 22. After bed in normal position but heat can be seen heating with curd and nipple as well as 2 inches to the right of this. Systolic murmurs at apex.

Becodi Saliuglia fr K Sobski Beaub fr T Ayg 3. Every hour for 6 hours then every 2 hours. Hard Sense 3. Stale

Joint is cool. Calomel 3 grains. 1 every 1 hour after a dinner. 

March 22 Tagg 2 P 108. Slight better than usual. February 1st 1st pleasant.

Tongue clean. Has no pain in joints except on movement. 

Then in same joints as yesterday. Lying in bed used to slightly sleep. Bowels moved. 

Blood 10.18 Left upper


Ev Temp 99.9
a skin people colour - T 98.4 P 90

March 25
Mixture every 4 hours  Temperature normal

27 No pain at all P 66 No fever or sickness Brain not recognising able

28 Died at night  R 6 7 Dr. Nutt Dr. Anderson 2 6 4

Feb 4 The start of pain in hips elevated T 99.8 P 96 Died and Freni

Boume Salicylate mixture 3 4 times a day

5 T 99.4 P 96 Pain as yesterday & in both feet, salutes 4 No sickness

Mixture every 2 5 hours

6 T 98.8 P 90 No pain felt across lumbar region on moving. Slept

well - Pupils freely Dr. Nutt 4 7 10

Note T 98.4 P 84 No pain

8 Pupils freely felt. well - No sickness, urine clear 10.3

21 Great Cure

Note in this Case the Duration before admission was 2 weeks. The temp

Duration was normal on the 3rd day Poins gone by the 6th day after

Pulse fell from 115 to 78 - Brain & spinal movements stopped

by the 3rd day No signs of sickness but he had Syphilis for 8

Duration of Treatment 1st phase 6 days - Relapse occurs the 4

after medicine had been omitted 7 days - 2 nd phase Temperature

normal 2 nd day Pain from the 6th day after - Prudice

Total Duration of attack 45 days
Case XII  Mary Murray  14  Servant  July 13  4 days

Was laid up with Rheumatic pain 6 months ago for the first time.
4 days ago after working hard the joints of the body, she felt slight pain in the knee of the right leg. She felt pain in the fingers of the right hand. She could not move on account of pain. T 79.9º R 32.

A few Acid Salicylic 3 g (X) every hour for 6 then every 2 hours.
Ev Temp 103.4º P 120 R 34.

July 14  9.30 am T 78º P 100 R 36 Heavy bleeding at beginning of the night. Abnormal pulse 3.30 pm P 116 Face flushed, tongue clean red. Right arm was tired.

Free from pain. Bowels open - Sweating freely. Cardiac sounds healthy.
In sitting 6.30 pm T 98.4º P 90 R 20

16 9.30 am T 98.4º P 85 R 20 Pain free entirely, but has occasional slight pain in left arm

3ist 45 hours (after 10 am)

17 No pain. Blood uric.

R. Fluid Levine 18 th for 5 days.

23 Disch. Cure.

Note: In this case the duration before admission was 4 days.

Temperature was normal on 1st day after admission. In pain on 4th. Pulse fell from 120 to 87, Blood.
In sickness - Duration of acute symptoms under treatment 4 days. Residuce 10 days. Total duration 14 days.
In this case the duration before admission was 14 days. The temperature was normal on the 2nd and the pain free by the 1st day after admission. Pulse fell from 120 to 70. Basic breath or admission absent on 7th day. No vomiting or diarrhea. Ears well affected.

Duration of treatment = acute symptoms 2 days. Recovery 16 days.

Total duration of attack 30 days.
Case XIII  Michael Lewis 31 123  Salem  Jan 7th  - 2 days
Patient has had 2 previous attacks the last in December (Patient has only been out of hospital 11 days & was released)
2 days ago all pains returned - Dr  Division  Leg, ankle, Knees  Elbow  Hand  all swollen & painful, right ankle & twisted
Has lost weight tremendous, system T 99.8
P Soda Salicylate 10 6  Every hour for 6 then every 2 hour
Evening Temperature 99.6  P 86  R 24
Jan 8 Swelling & pain subsides, had feeling of sickness immediately after medicine yesterday, but this passed off in about 5 minutes
Heart & Sore  on clear - T 98.6  P 84  R 24  No pain
Lethargic  Z  Dr  Amen  Spee  3/4  Dr  Strickler  3/8
Jan 9 Better today, medicine was not altered until all symptoms of
Stomach had passed off
Reid 3 1st
Jan 10 Feels dry after mealtime, sometimes lasting for 2 hours after the
Breakfast  S  P 80  8 4  steam  Peptid  3/4  in the
Jan 11 Better  P 79  T 98.4  R 2  Peptid  Spee  3/4  XV  Ag  9/4  to the
Salicylate twice a day
Jan 14 Has some pain in elbows last night  Salicylate 3 times a day
Jan 15 Had Syphilis this morning & left foot was larger than right
but both Sore - Right eye feels weaker. Often bruised
Itself - Has Clear - Has lacrimation  Looks  Pain
With Salicylate
Jan 16 T 98.2  P 2
Jan 22 Quite well
Jan 22 Discharged at our request feeling well
May 26 First Case

Note: In this case 24 days before admission 14 days.

Temperature normal, 8th 82. Pain only 3 days after admission. Pulse fell from 100 to 58, Bearil in admission vomiting but no diarrhea. Diately yerus symptoms under treatment 8 days,chine 10 days total, death patient 24 days.
Case XIV David Winston 51 32 Stentleman - March 21 1845

fell ill three weeks ago after which he has a fit of shivering, one week after the pains came on in neck - Small of back, knees, ankles, hips, left foot - Now the joints of the right leg are principally affected. Right arm was affected in all joints but especially fingers. One of the joints have been reduced or broken, priest those of the right foot which is to know. This is the fourth attack & patient says he has been quite as bad in previous attacks, has never been pain over the head - Cannot sleep as pains are worse at night. One has footache - never dysphoria - Tongue moist with white fur - Has perspired freely at commencement but not all for the last few days - T 102.4 P 102 R 32. Skin dry. Do not sleep or digits. Bowels moved 2 days ago. Has loud systolic murmur at apex & also heat at back.

Retina: Sclerotic fundus of X left, Bicch. to E. Clay 3" every hour.
Cotton wool around joints - Hand Stentleman R. Stentleman R.

Evening T 104 P 115 R 34


Ett T 100.3 P 98.


Ett T 99.4 P 98.

24. No pain except on movement of shoulders, urino 7 3/4, Cy given.
7: A. T. E. filled, 40 lb. C. W. Calander Bay 3' 5.5.8.
Urine 40 oz. in 12 hrs. Sp. gr. 1.010.

15: Severe - Anorexia.

Note: In this case the duration before admission was 6 days. Temperature was normal on the 3rd day. Pain free by 4th day after admission. Pulse fell from 98 to 52. No diarrhea, vomiting, or acute symptoms under treatment. Died on the 15th day. Total duration of attack 20 days.
Case X
15th April 1879

Patient felt well 2 weeks ago. Then had pain in right heel, which
to continue for 3 days then went into both knees and right thigh.
He has had an attack before. Dr. Davenport: Pain in right thigh.

Right ankle - the affected joint was red & swollen as the
right knee is now. Temp 99.6 P 120 R 36. Does not trust much.
Pains worse at night. Tongue pink & white fur. Hair a
spot the back on vertex, no albumen. Urine 1818 acid, clear,
no albumen - pale yellow colour.

R Miss A. Saliehli for VIII, every hour for 6 hours. ET 8.16.

8. Urine 10 oz in 12 hours. Today almost white & turbid with mufadic
of white crystals - acid 1818. No albumen. Chloride abundant.
Saliehli acid well marked. Has no pain T 98.8

Usual water 4 times a day

9. Tongue almost white fur. No pain only a numbness in arms
Has been sneezing profusely this morning. F 2 16

Reaction to Alkali (gsp. of sweat in sugar, stand salt). T 98.2

10. Urine 22 oz in 12 hours. No pain. Sleep fairly well. T 98.4

12. Urine 8 oz in 12 hours - asleep. Better three times a day.

13. Urine 25 oz in 12 hours. Feels quite well. P 70. Small, tingling
in face. 1st small of head, 1st system but no back.


Dr. F. Ferris 14th & Mrs. Ackerman 21st to see.

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Pepsi Mint 2 oz. tris.

Ex Temp 103.4 P100 R24 S25.

9 Tqg P44 R24 Skin moist. Has a little diarrhea during night.

This morning feel better, pains worse in hands but better in

left foot. No headache or nausea. Tongue firm, 105.

10 Tqg P44 R20 Pain at present in both shins. There

effusion into right knee joint much less. Perspirate freely

during night. Feel much better than morning. Bowels open.

Tongue cleaner. No headache. Slight sleep singing.

Ex Temp 104.8 P42 R22

11 Tqg P48 R24 Passed a good night. Pains in right knee.

left shoulder stiff. Asthmatic free from pain.

Has a slight cough with frothy expectoration. This morning

complains of slight sore throat. Feels a little relaxed.

no headache, no nausea. Bowels open during night.

Ex Temp 104.2 P90 R30

Medicine every 3 hours after 2 p.m.

12 Tqg P72 R19 Pain now in left shoulder & feet.

toes - worse in night. Slighty of right knee gone.

Cough troublesome during night but slight expectoration.

No pain in chest. Tongue cleaner. No headache or

Bowels regular. Ex Temp 104.8 P82 R23.

13 P70 R19 This morning has a little diarrhea right foot.

otherwise quite easy. Keen 6.03 oz. in 12 hours.

15- Tqg P66 R22 Keen 18.9 in 12 hours. Felt inclined to vomit

this morning specially after medicine. Drink went just away.
Case XVI  Carl Peters en 22  Roman  May 16 1 2410.

R Acid: Salicylic 80 g. Syrup 60 g. Menthol 25 g. Agar 3 Troyoz. 32° 24 hor. 11 78.

May 17 Has been ill a fortnight, Pains in both knees, L.R. back, left elbow also. Tongue dry, spots, sour centre. Bowels, not open for 5 days. Feces, loose, passing profusely, Pulse regular, 90, Legato, Brad tribe, temp 102.6 P. R. 8.

May 18 Has been ill a fortnight, Pains in both knees, L.R. back, left elbow also. Tongue dry, spots, sour centre. Bowels, not open for 5 days. Feces, loose, passing profusely, Pulse regular, 90, Legato, Brad tribe, temp 102.6 P. R. 8.

May 19 Has been ill a fortnight, Pains in both knees, L.R. back, left elbow also. Tongue dry, spots, sour centre. Bowels, not open for 5 days. Feces, loose, passing profusely, Pulse regular, 90, Legato, Brad tribe, temp 102.6 P. R. 8.

May 20 Has been ill a fortnight, Pains in both knees, L.R. back, left elbow also. Tongue dry, spots, sour centre. Bowels, not open for 5 days. Feces, loose, passing profusely, Pulse regular, 90, Legato, Brad tribe, temp 102.6 P. R. 8.

May 21 Has been ill a fortnight, Pains in both knees, L.R. back, left elbow also. Tongue dry, spots, sour centre. Bowels, not open for 5 days. Feces, loose, passing profusely, Pulse regular, 90, Legato, Brad tribe, temp 102.6 P. R. 8.

May 22 Has been ill a fortnight, Pains in both knees, L.R. back, left elbow also. Tongue dry, spots, sour centre. Bowels, not open for 5 days. Feces, loose, passing profusely, Pulse regular, 90, Legato, Brad tribe, temp 102.6 P. R. 8.

May 23 Has been ill a fortnight, Pains in both knees, L.R. back, left elbow also. Tongue dry, spots, sour centre. Bowels, not open for 5 days. Feces, loose, passing profusely, Pulse regular, 90, Legato, Brad tribe, temp 102.6 P. R. 8.

May 24 Has been ill a fortnight, Pains in both knees, L.R. back, left elbow also. Tongue dry, spots, sour centre. Bowels, not open for 5 days. Feces, loose, passing profusely, Pulse regular, 90, Legato, Brad tribe, temp 102.6 P. R. 8.

May 25 Has been ill a fortnight, Pains in both knees, L.R. back, left elbow also. Tongue dry, spots, sour centre. Bowels, not open for 5 days. Feces, loose, passing profusely, Pulse regular, 90, Legato, Brad tribe, temp 102.6 P. R. 8.

May 26 Has been ill a fortnight, Pains in both knees, L.R. back, left elbow also. Tongue dry, spots, sour centre. Bowels, not open for 5 days. Feces, loose, passing profusely, Pulse regular, 90, Legato, Brad tribe, temp 102.6 P. R. 8.

May 27 Has been ill a fortnight, Pains in both knees, L.R. back, left elbow also. Tongue dry, spots, sour centre. Bowels, not open for 5 days. Feces, loose, passing profusely, Pulse regular, 90, Legato, Brad tribe, temp 102.6 P. R. 8.

May 28 Has been ill a fortnight, Pains in both knees, L.R. back, left elbow also. Tongue dry, spots, sour centre. Bowels, not open for 5 days. Feces, loose, passing profusely, Pulse regular, 90, Legato, Brad tribe, temp 102.6 P. R. 8.

May 29 Has been ill a fortnight, Pains in both knees, L.R. back, left elbow also. Tongue dry, spots, sour centre. Bowels, not open for 5 days. Feces, loose, passing profusely, Pulse regular, 90, Legato, Brad tribe, temp 102.6 P. R. 8.

May 30 Has been ill a fortnight, Pains in both knees, L.R. back, left elbow also. Tongue dry, spots, sour centre. Bowels, not open for 5 days. Feces, loose, passing profusely, Pulse regular, 90, Legato, Brad tribe, temp 102.6 P. R. 8.

May 31 Has been ill a fortnight, Pains in both knees, L.R. back, left elbow also. Tongue dry, spots, sour centre. Bowels, not open for 5 days. Feces, loose, passing profusely, Pulse regular, 90, Legato, Brad tribe, temp 102.6 P. R. 8.
Case XVII  John Shaw 41st 231 Big spring Ave May 31st 5 days

Has been ill 6 days, Her face is another clearer. Right wrist, all
of which are rather swollen. S Day 8  She went well, Her breathing
was clear - Tongue dry, at base thin center, not white. Few Bubbles
still open for 2 days. Has not slept for 5 nights. No much Vomiting
head or anything left Indigestion in her Stomach - Bowels rather soft
Head Sore Blisters

Pain in forehead in several sites - After taking 25cc of mixture
T 103.2 P 98 R 26 (4 pm)  Evening T 103 P 96 R 24

Slight cold all night according to report - Appears to be more cold today
Sore Stomach - Some shooting occasionally - Her pain
in joints. Bowels open freely. Tongue much freser but more

Breath Offensive - Pulse 76 regular but easily compressible
T 98.8 R 18  Respiration poor freely - Eyes very prominent Staring.
(2 pm) Dr. S. Salinger

2 4 pm  
Zum 30 oz in 12 hours 16.3 oz abounded Salping 7 cc water
2 oz albumin - T 97.8 P 64 R 16
E 10 P 64 R 16

3 4 pm  
Zum 180 oz in 12 hours 10.34. Feels very much better. Now
Says he been better than before illness. Pulse slow slightly
irregular T 98 P 60 R 20.

4 5 pm  No pain at all. 12 M L Open. Zum 180 oz in 12 hours
10.27 and clear no Sediment 2 oz albumin - Salping
head still in urine (8 am = 66 hours since last (5 am)

5  Zum 180 oz in 12 hours acid 10.24 Clear no albumin. The urine
of Salping and - Last trace seen of Staining at
7 pm = 77 hours since last (5 am)
Case XVIII James G. County MI School July 26 1918

Has been ill about 10 days pain in knees ankles back and head. Headache in arms, knees and ankles on touch or pressure of the ankles are swollen. T: 102.4 P: 110 R: 36. Breaths open 4 times this morning. Tongue purplish but moist. Rolling thirsty. Appetite bad. Has a similar attack last winter

Heart: Short systolic murmur at apex.

R front aortic Schiötz Jr. Every hour

4 hours after taking first dose the Schiötz acis appeared in the urine.

T: 101.6 P: 104 R: 40 (6:30 am)

July 27

Very sick after medicine which was omitted after midnight.

T: 102.2 P: 88 R: 36 (9 am) Pain has left. urine feels better.

R. Systolic Schiötz 3 at 3 1/2. S: Systolic noise heard.

T: 99.8 P: 84 R: 38 (2 pm)

28 T: 98.4 Feels quite well no build. Died too late.

July 2 Discharged.

Note: In this case the sweat line before admission was unclear. The temperature was normal on the 2nd day for the 1st day after admission. Build disappeared by 2nd day. No relapse. Sensation of acute symptoms has not disappeared. 2 days. Minimum 7 days. Total attack 14 days.
Can. XIX. Many Sea Track 1118. Southern. 20 7 28 3rd day -

Patient is a short healthy fat with flushed cheeks. Has taken
ill 3 days ago with pain & swelling in feet. Body still open
for 2 weeks. He now has pain in all joints, legs are an
not swollen. Left arm is the least affected. This
in the 2nd attack. T 102.5 (11.30 am) Systolic blood pressure
extending upwards, but inconstant heart at apex. P96 R96
R 8 P 8 8 7 E. 24. 2. 14. 5. 34. 3
Head Osmotonic 340 Osmotic. T 104.6 (2.55 pm)
Dressing. T 105.4 (6.20 pm) P 110 R 34. Has 1 dose of
mixture at 4 pm the 2nd at 6 pm and at 6.30 pm
after that every 2 5th hour. T 103.8 R 86 R 7.15 pm
Skin moist. T 105.8 P 100 R 26 (9 pm) Skin dry.

For 9 (4 am) T 101.2. T 99.4 (9 am) P 94 R 24. Passed a wetting at
with stools of sleep. No delirium. Respired freely
but not profusely. Pains in the arms at times.
Took mixture every 2 5th hour until 6 am. Still has decided
patient complaining of headache. Slight moistness in
Her nasal turbinates since then.

11 am. At present patient complains most of pain in the back
knees. Throat is better, but elbows and shoulders are getting
worse. No headache, but slight dryness in ears. Body
after lower teat freely. Skin dry. Not.

1 R. Thirst. Tongue dry with red center and edges. No
pain or oedema at precordial region. Felt upright
last night. Wheeze temperature was high.
Case XIX
Mary Jane Black
4/18. 1st Attack
Mar 15. P70 R19. This morning had slight pain in wrist, backache in Scatua.

No chill for temp. - Blood open - Very little sleep.

No sweating

Rest. Must Schlep the Sci.

17

Feel sick after medicine again.

22

Acting pain in Throat. Both Stiffs in legs.

30

Acting of knees - good swell towards night. Urine 26 oz. in 12 hours. Sf for 10.15. Red albumen - Alkalies

Without flint - No sparit -

Jan 1st - Great bell.

Note: This case was a first attack in a typical rheumatic subject.

The temperature reached 106.4; but as it then began to fall, the treatment was pursued in without the aid of the bath. Acute symptoms rapidly subsided.

Temperature almost normal. The 5th day, acute pains gone by the 6th day — but acting pains of chronic nature during most of her stay in hospital. The fluid was indigo in the remainder of the case. Was never seen sleeping - Stiff pain in the legs. The pulse fell from 110 to 60.

The duration before admission was 3 days. Acute symptoms subsided by the 6th day. Recovery 55 days. No total duration of the attack 58 days.