great intolerance of light; so much so, that I had difficulty in raising the upper lid; and, when I did succeed, the front of the globe was rapidly rolled up into the inner corner of the orbit. I could just see that the pupil was not dilated, and responded to the light. She was now taking very little food again. She next suffered from restlessness at nights, and from dardings and flashes of light, as she said, just behind her eyes. She had frightful nights, and saw faces and horrible things.

From this time until Christmas-day, she could not discern light from darkness. On this day, she thought she saw a glimmer of light; and, after a week or two, could tell where the windows and fire were sometimes. Next, she could see that figures passed before her when her friends moved about the room. After awhile, the window-frames were distinguished, and the outlines of objects held up before her, such as chimney ornaments. Presently, she could read a word or two in very large print; and now she can read small print, in fact, can see pretty well. I ought to say that, for many years before this last illness, she was short-sighted, and wore concave glasses.

A peculiarity in her case I may mention, viz., the extraordinary facility which she possesses of flexing her limbs, such as bending her thumb backwards upon her wrist; and she can bring her toe over the opposite shoulder. This young lady is of a very kind and amiable disposition; neither deceitful, perverse, nor obstinate, and is not at all fanciful or even troublesome.

The treatment at first was by antispasmodics and cathartics, with bromide of potassium and atropine lotion for the eyes. We were unable to use the ophthalmoscope on account of the intolerance of light. After this, we gave her iron and strychnine, and tried the hypodermic injection of morphia; this latter did not give much relief, but draughts of hydrate of chloral at bedtime gave her great comfort and better nights. Next, quinine and iron were given, which improved her appetite and general health.

Early in December, vomiting reappeared, which yielded pretty quickly to two-grain doses of oxalate of cerium. We then gave her iodide of potassium and perchloride of hydrargyrum, and applied the dry cups to the back of the neck three times a-week for two or three weeks. Under this, she seemed to improve a good deal. We then returned to the iron, which she took regularly onwards until she was cured. During the whole time, she had liberal diet whenever she was able to take it, but often for a day or two would take almost nothing.

I am disposed to view this case as one of hysterical congestion of the retina, and probably of portions of the base of the brain.

We know that undue susceptibility of and disorder of the nervous system will produce unequal distribution of blood in the capillary vessels, and that hysteria consisting, as it appears to do, in disorder of the nutritive and circulatory system, and often an exalted sensibility in one part of the nervous system, either of the peripheral nerves or of the centres; and this exalted excitability, often expressed in the form of hyperæsthesia or spasm, is often accompanied by interrupted irritability of some other region evinced by anæsthesia and paralysis, as Hasse puts it, nutritive derangement of the general nervous system, both central and peripheral. We also know that hyperæmia of the brain gives rise to excessive sensibility to light, to flashes in the eyes, and to an excited state of mind, wakefulness, and dreaming sleep; that the optic nerve, more than any other nerve of special sense, has the power of conveying impressions which excite muscular motions, especially in regard to the iris, whose actions are, to a certain extent, regulated by the degree of light impinging on the retina.

We also find, from the researches of Brown-Séquard, that the same peripheral cause of irritation acting on the same centripetal nerve may produce the greatest variety of effects, including every functional nervous affection or disorder. This is well illustrated, he says, by the various following effects on the eye of a neuralgia of the infra-orbital or supra-orbital nerve. He enumerates, amongst others, congestion of the conjunctiva and of other parts of the eye and photophobia; and says that probably the variety of morbid phenomena which follows an irritation of centripetal nerves depends almost entirely on differences of excitability of various parts of the nervous centres in different individuals. The peculiar influence which the fifth nerve exercises on the nutritive processes in the organs of the special senses, explains how nutrition of the organs may be impaired in consequence of the impairment of the power of either the fifth nerve or of filaments of the sympathetic in connection with it. A possible connection between the fifth nerve and the sense of sight is shown in cases by no means uncommon, where blows or other injuries of the frontal nerve as it passes over the brow are followed by total blindness, the result of defective nutrition of the retina, which in some cases ensues immediately as if from concussion, in others has come on gradually like progressive amaurosis, and in some with inflammatory disorganisation; and we can readily conceive it occurring in a curable form as the result of congestion.

THE TREATMENT OF RHEUMATIC FEVER BY TINCTURE OF PERCHLORIDE OF IRON.*

By SAMUEL S. DYER, M.D., Ringwood.

THE variable climate of England, and the amount of moisture in the air of the Avon Valley, have given me frequent opportunities of testing the different kinds of treatment that have been proposed or recommended for rheumatic fever. My first interest in its history and treatment was occasioned by the serious illness of my father from this cause just as I had entered the medical profession, and I have good reason to remember his early prognostication of six weeks' inability to see his patients, and a month of severe suffering. The medicinal treatment at that time consisted of calomel and opium in a pill every four hours, and bicarbonate of soda in a mixture with aromatic spirits of ammonia. Tedious and suffering as the actual illness was, the convalescence was even more unsatisfactory, as may be well imagined, after the combined effects of illness and mercurial treatment for three or four weeks. After a while, the greater alkaline treatment was strongly advocated by those whose opinion and practice were worthy of example, and all my cases were treated with large doses of bicarbonate of potash or soda, or with nitrate of potash in solution, and an opiate at night; the affected joints being thickly covered with cotton-wool and oiled silk, as first suggested by Dr. Todd.

The treatment by large doses of nitrate of potash was decidedly an improvement, and my case-book for 1850 gives, amongst others, two very satisfactory examples, where severity of symptoms only continued a week, and the convalescence was proportionately shortened. The dose taken was a scruple every four hours.

Cases treated by alkaline instead of neutral salt were very slow in recovering, and the patients were weak and pallid for some time afterwards. There can be no doubt that the large quantity of alkali taken into the system produced a deleterious effect upon the blood; nor was the immediate operation of the medicine satisfactory, for, even when the urine had become less acid, and in some cases even phosphatic and alkaline, the sour perspiration was still persistent, and the joints were still swollen and painful; in fact, the treatment was not curative in the common acceptation of the term, and it may well be questioned whether the after-consequences of such medication were not worse than would have resulted from letting the disease run its course; a course which, with rest and careful regimen, naturally tends to recovery, as shown by Sir William Gull and Dr. Sutton.

Both Dr. Owen Rees and Dr. Wilks greatly altered the line of treatment until recently in vogue, by the administration of an acid rather than an alkali; Dr. Rees upon chemical principles, and Dr. Wilks, at first, simply to try whether or not the supposed success of potash or of soda was due to the medicine; but Dr. Wilks's first case treated with dilute nitrohydrochloric acid was so satisfactory in its progress and result, that he subsequently adopted the treatment in other cases from conviction of its good effect. The plan adopted by Dr. Rees of giving lime-juice frequently and in large quantities has much to commend it, and has one objection only that I can see (but this, to a man practising in an obscure country district, is very considerable), it is the difficulty and expense of getting the supply of fresh lime-juice: lemon-juice does not appear to produce an equally good effect, and no artificially made imitation will answer the purpose.

It was in 1869 that Dr. Russell Reynolds reported in the *BRITISH MEDICAL JOURNAL* some cases of rheumatic fever treated by tincture of perchloride of iron; and I determined, on the first opportunity that should occur, to avail myself of his suggestion, and give my patient the benefit which I firmly believed would result from the treatment. In the state of system predisposing to rheumatic fever, we have an acid-generating condition rather than an acid one; for this the muriatic acid is highly beneficial, as seen in the treatment of acidifying forms of dyspepsia. In every case of rheumatic fever which had come under my notice, there had been a tendency to anæmia, always attributed by me to the spanæmic effect of alkalies administered, but, after all, probably, accountable to the disease itself; and, from these circumstances, it seemed that the treatment by the muriated tincture of iron would effect two most desirable indications.

Every case that has been treated by me on this plan has been one of true rheumatic fever, with inflammation and swelling of larger joints, quick pulse, and high temperature; and those to which I would here more particularly allude have been second or third attacks, thus giving the patient as well as myself an opportunity of judging by comparison of the value of the medicine.

* Read before a meeting of the Southampton Medical Society.

The first case was in the spring of 1870, when a woman, aged 37, was taken ill with every symptom of acute rheumatism, from which she had suffered twice before. She was at once given a mixture of two drachms of tincture of perchloride of iron in eight ounces of water, of which to take a sixth part every four hours, and an opiate pill for that night. The sheets were removed from the bed, the diet regulated, but nothing else suggested or done. On the following morning, she expressed herself as being more comfortable; the next, still better; and, on the third day, as being quite free from all pain, and able to move freely. Her constitutional symptoms were correspondingly improved, and without question or solicitation from me she expressed surprise at her rapid recovery, and the marked effect of the medicine. I only attended her on this occasion ten days.

A strumous, delicate young woman, aged 20, had an attack of rheumatic fever when a child, which confined her to the bed and house for five weeks. In January 1875, I was sent for to her, and found that she had acute rheumatism fully established. She was in so much pain that I gave her five grains of Dover's powder, with ten of nitrate of potash, every four hours; but, on the next and the following days, there was no improvement in any of the symptoms; this treatment was therefore discontinued, and the tincture of perchloride of iron in twenty-drop doses every four hours substituted. Within two days there was a marked change in the symptom; by the end of a week all sign of acute rheumatism was gone, and in a fortnight she was fairly well, but continued to take iron as a tonic for some time longer.

A young woman came to the surgery in the spring of 1875 with commencing symptoms of acute rheumatism, from which she had suffered severely three years before. She had a loud aortic systolic bellows-sound, the result of that illness. She was sent to her lodgings, and, feeling somewhat better, the next day she resumed her work, but very shortly had to lie up altogether. My brother attended her, and gave her tincture of perchloride of iron as the only medicine. She made a rapid and complete recovery, although the symptoms, from the day she first returned to work in the commencement of the illness, were very marked and severe.

A lady, aged 67, had had two severe attacks of rheumatic fever in former years. She has a seriously damaged heart from aortic obstruction, dilated cavities, and mitral insufficiency, and, during the last five years, has had occasional attacks of dyspnoea, passive congestion of lungs or liver, oedema of feet and ankles, peritoneal effusion, and so on, necessitating treatment with pilula hydrargyri, compound squill and digitalis pill, compound jalap powder, and mixtures of iron and digitalis. On February 23rd, 1875, she sent for me, complaining of severe abdominal and lumbar pains greatly increased on any movement of the body, deep inspiration, or cough. There was not any fever, no quickness of pulse nor heat of skin; the urine was neither scanty nor high coloured. She had been sitting a day or two before in a draught between an open door and window. As I considered it was simply muscular rheumatism, I advised her to completely cover the painful parts with wadding and flannel, and gave her a mixture containing small doses of aconite, chlorodyne, and chloric ether. She did not get any relief, and, by the 26th, it was evident that a severe attack of acute rheumatism had set in. Temperature 102; pulse 130, irregular and unequal, as it always has been since I have known her. The urine was very scanty and high-coloured; there was abundant sour smelling perspiration; the elbows, knees, wrists, and ankles, were much swollen, very red and painful. Matters were so alarming, that absent members of the family were telegraphed for, and the patient was most desponding. Treatment by tincture of perchloride of iron (fifteen drops every four hours) was now commenced and steadily persisted in. On the 28th (fifth day of illness, and second of more marked symptoms of rheumatic fever), matters were still very unfavourable; the joints were, as before, much swollen and exquisitely tender. On March 1st, all symptoms were less severe, and, on each succeeding day, there was marked improvement, so that, by the end of a week, the patient was considered convalescent, although from her naturally feeble frame it was some time before strength was established, or the weather of the past spring would justify our letting her out. She has not had the slightest return of rheumatism, but the dropsical effusion has twice recurred, and each time has been relieved by the accustomed remedies. This patient is a woman of good intelligence, and as she was recovering from the acute rheumatism, she asked, "What is that wonderful medicine I am taking? Each dose seems to do me good, and I never recovered so quickly in either of my former attacks."

The next case to which I would allude will not appear so favourable as the four of which I have been speaking, inasmuch as it was obstinate at first, attended by two severe relapses, and followed by a prolonged debility before thorough and complete recovery was established. It was that of a youth, aged 19, having in-door employment,

but having an exposed walk to and from his work by the river and fields, and living near the water's edge. He, too, had suffered from a former attack of acute rheumatism. On this occasion, he was first taken ill on May 22nd last, and continued much in the same state for a week, but the first week in June he became much worse; temperature 103; pulse 130. He had great pain in the cardiac region, and mitral systolic *bruit*; scanty high coloured urine, depositing dark red sediment in great abundance; profuse acid perspiration, but not much pain in the joints. A blister was applied over the heart, and twenty drops of tincture of perchloride of iron given every four hours. The next day, June 14th, he was in much the same condition as to temperature and pulse, and general symptoms, but after this he began to improve, and rapidly became, to all appearance, convalescent; but he was not free of the predisposing rheumatic poison, for, on July 3rd, I was sent for to him, and found him as bad as ever, with high fever; temperature 104; pulse 130; pain at the heart, anxious expression, and pains at the shoulders, knees, and ankles. A blister was again applied, and the iron mixture given as before. In the two following days the state of this patient was much the same, and, on the 6th, the third day of relapse, I went to Swanage and left him under the care of my brother; on this day the temperature was above 104; pulse 130; and all the acute rheumatic symptoms very severe. On July 8th, the fifth day of the accession of illness, I came home for two hours and saw this patient. He was wonderfully better, sitting up in bed, with cheerful countenance; all symptoms of fever were gone; and rheumatic pains had also left.

One other case has occurred since this, having the same conditions I set down at the commencement of this communication, as rendering it worthy of record by its bearing upon the question; viz., high temperature, quick pulse, inflammation, and swelling of larger joints in a person who had previously suffered from a similar illness.

A delicate lad, aged 17, was taken ill with all the symptoms of acute rheumatism. I removed the sheets, placed him between the blankets, and at once commenced the treatment with perchloride of iron. On the fourth day of treatment, he was quite free from pain as well as from fever, and made a rapid recovery.

Although the fifth case, taken as a whole, was not so satisfactory as one would wish to have recorded, on account of the relapse which followed premature exposure to damp air, the wonderfully marked improvement from very acute symptoms between the 6th and the 8th of July was most gratifying, and I never saw such good result in any other case of acute rheumatism, nor from any other kind of treatment. I think it tells immensely in favour of the plan recommended by Dr. Russell Reynolds, a plan of treatment which must be ranked with those which are said to characterise the present age; that of trying, or adopting, a special remedy for special disease, rather than its treatment upon general principles. To some extent this may be the case, but we shall generally find that, even while adopting a special remedy, we are at the same time acting upon sound general principles. Dr. Reynolds tells us that he was first induced to give this medicine in acute rheumatism from its well-known value and efficacy in rapidly spreading inflammations, of the skin in erysipelas, and of the mucous membrane in throat-affections.

In conclusion, I have only to add, that the result of a fair trial of this plan of treatment in my own practice, of which the foregoing are but half-a-dozen, selected from many other cases, has been so satisfactory, that I should most decidedly adopt it in every case, unless the patient should happen to be hyperemic and plethoric, when I should go back to the treatment of former years, that by large doses of nitrate of potash, from a recollection of its efficacy.

A CONTRIBUTION TO THE HISTORY OF HEREDITARY SYPHILIS.

By A. S. MYRTLE, M.D., Harrogate.

As bearing on the late discussion on syphilis, the following case may prove of sufficient interest to merit insertion. In March 1862, I visited a child, aged four months, covered with a very copious syphilitic eruption and inflammation of the mucous membrane of the nose and mouth. It was supposed the child had contracted the disease from its wet-nurse, and the father was threatening to take legal measures against her. Meanwhile she had been dismissed, and I never saw her. On questioning the father, I found he had syphilis a year and a-half before his marriage; that he had been properly treated for it under Sir William Fergusson, and, having shown no signs for twelve months, was permitted to marry, since which event he had never suffered from any form of disease as far as he knew. His first child was born dead at