twenty-five grains to the ounce; great and distressing thirst; a craving unsatisfied appetite; aromatic breath; preputial irritation and constipation; but without any pulmonary complication—began the treatment by ammonia and its phosphatic salt in the form above described in July last; and in December, though the proportion of sugar had only decreased to fifteen grains to the ounce, yet the nutritive functions had been so improved, that he had gained from nine to ten pounds in weight, and the more distressing symptoms had decreased. The health of a gentleman, 49 years of age, suffering from diabetes, which had not been detected till I examined the urine, became so much worse and with such serious complications, that it became necessary to advise his wintering in the south of Europe in the winter of 1867-68. In addition to the typical symptoms of diabetes, paroxysmal attacks of convulsions of an epileptic character, which had preceded the discovery of the sugar in the urine, and for which he had taken large doses of the bromide of potassium, were followed by serious indications of pulmonary disorder in the form of broncho-pneumonia, which rendered residence in a more temperate climate during the winter desirable. On his return in April of last year, the diabetic condition had rather increased than abated, although the cerebro-spinal and pulmonary symptoms had disappeared. In May, when the ammonia and phosphatic salt were commenced, the urine contained twenty-six grains to the ounce. The thirst was distressing, and the emaciation great. A moderately restrictive diet was enforced. In December last, after the treatment had been persevered in for six months, the specific gravity of the urine was 1028; it contained twelve grains to the ounce. Proportional to this decrease in the amount of sugar was the increase in weight of the patient. The thirst had decreased; and the physical debility which marked the earlier periods of the year was followed by powers of bodily exertion equal to that he had enjoyed before the decay in his health commenced; and, what was of more importance to him, the restless and fitful state of the nervous system was exchanged for powers of application and mental energy almost equal to the best periods of his life. In conclusion, I will venture to add one rule in the administration of these remedies essential to their beneficial action. It is, that they be uninterruptedly continued. It is only after long use that their remedial action becomes apparent. I will add no theoretic views as to the mode of action of ammonia and its salts. It is necessary, however, here to say that perseverance in the use of these salts is absolutely requisite. This observation is intended for the encouragement of those who are too apt to exchange one remedy for another, if the first selected be not quickly followed by remedial effects. Let the principle on which a given case is to be treated be first determined, then undeviatingly should that principle be followed, subject only to such contingent disturbances as cannot be foreseen.

CASE OF TWINS: FOLLOWED BY EPILEPTIC FITS AND DELIRIUM.

By EDWARD SANDWELL, L.R.C.P. Ed.

ON February 10th, at 1 P.M., I was called to see Mrs. S., whom I was engaged to attend in her confinement. She had gone the full period. She was having continuous but feeble pains. The membrane had broken early in the morning, the pains continuing regularly until 10.30 P.M., at which time I delivered her of a living male child, the head presenting. On making an examination, I found another bag of membranes containing another child; the head presenting as before. On rupture of the membrane, two or three sharp pains proved sufficient to expel another male child, but dead, and partly decomposed. In a few minutes I removed the placenta, quite distinct from each other. I left her doing thoroughly well at 11.30 A.M.; but, at 5.30 A.M. on the 11th, six hours afterwards, I was called hurriedly to her. I then found her in a fit of a distinct epileptic character. I ordered ice to her head, and the usual remedies. This first fit was followed by one every twenty minutes, without any conscious intermission for twenty-six hours. Then partial consciousness returned, but with it delirium, which lasted until the third day. I now prescribed a pill of four grains of calomel, and a quantity of opium; and also gave her a quantity of nourishment. She gradually improved, and took tincture of cinchona with ammonia every four hours. On the eighth day she complained of her breasts; they had filled rapidly and became somewhat nodulated. I ordered them to be rubbed with equal portions of brandy and sweet-oil, which relieved her after two applications. On the tenth day she took the child to suck, and has now had it for forty-eight hours, and both mother and child are doing as well as could be under the most favourable circumstances. No uterine symptoms have shown themselves. Mrs. S. had never had epileptic fits; she had been subject to fainting fits, but had been free from them during pregnancy. Her mother died in childbed. The whole of the family are highly nervous.

CASE OF CEREBRAL COMPLICATION OF ACUTE RHEUMATISM.

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AMONG the rarer events that occur in the course of acute articular rheumatism must undoubtedly be reckoned true cerebral complications, or those affections of the brain which, by their intrinsic gravity, acquire for the time being a substantive position. Dr. Fuller has discussed them at some length in the tenth chapter of his work; and one of Professor Trousseau's Clinical Lectures, headed "Cerebral Rheumatism," is devoted exclusively to their consideration; but, with these and perhaps one or two other exceptions, writers seem to have made their comparative infrequency an excuse for leaving the subject almost untouched. Recent observations with the thermometer, however, have imparted a new interest to these complications, an unusual elevation of temperature having been found frequently to coincide with their occurrence. Several such instances have been reported, the first, I believe, by Dr. S. Ringer, in the *Medical Times and Gazette* of October 5th, 1867. The following case, although it may not be so purely characterised as to be typical of this class, possesses one or two points of its own which seem to be worthy of notice.

M. J. W., a laundry-girl, aged 15, and looking fully that age; had menstruated, but not during the last six months. She was of sanguine temperament. Her mother was living and healthy. She had usually enjoyed good health, and had not before suffered from rheumatism, nor from any neurotic disorders. Her present illness commenced three days before admission (April 11th), after exposure to cold. The joints were attacked successively: the right elbow, at noon of the 11th; the left ankle on the same night; the left knee on the 12th; and the right knee and ankle on the 13th. There were concurrent insomnia and anorexia. She was brought into the Bath Royal United Hospital, April 14th, in a completely helpless state, having already a systolic murmur at the apex of the heart.—At 7 P.M. the temperature* in the axilla was 103 deg; pulse 128; respirations 32. She was ordered to be put into flannel, with cotton wool to the affected joints. The following draught was ordered to be taken every four hours: R potass. bicarb. ʒss; potass. nit. gr. x; aq. camph. ʒj. M. She was directed to take eight grains of Dover's powder every night, and to have low diet, with a pint of milk and a pint and a half of beef-tea.

April 15th. She had passed a good night, but complained of pain in both knees, and in the left ankle and right wrist, which presented the usual appearances. She had also uneasiness at the cardiac region, where was a very distinct soft systolic apex murmur, but no friction-sound. Perspiration was profuse, neutral in its reaction. Temperature 101.8 deg; pulse 132, rather weak; respirations 36. The tongue was moist, with a brownish fur on the dorsum. The bowels were regular. The urine was of specific gravity 1.020, feebly acid, uncoagulable by heat and nitric acid. The treatment was continued.

April 16th. She slept well in the early part of the night. The pain was rather severe in the left hand, the other joints were better. Temperature 103 deg. Urine alkaline. The treatment was continued.

April 17th. She had no sleep. There was a good deal of pain in the back and in the left arm. Temperature 103.2 deg; pulse 124; respirations 36. A systolic murmur was heard at both the base and the apex of the heart. The draught was continued, but the powder was omitted; and she was ordered to have a minim and a half of liquor atropiæ injected subcutaneously into the left arm at bedtime.

April 18th. She slept several hours after the subcutaneous injection. She had most pain now in the right shoulder. Temperature 101.2 deg; pulse 116; respirations 44; urine acid.

April 19th. She had not much sleep, though she was not in much pain. Temperature 101.8 deg. The urine was very slightly acid.

April 20th. She had a good night, with scarcely any pain; and the arthritis had for the most part subsided. Temperature 104.4 deg; pulse 116; respirations 46. The cardiac murmurs were much as before. There was dulness at the bases of both lungs, greater at that of the left, where also bronchial breathing and obscure crepitation were heard. She had profuse perspiration, with copious military eruption over the trunk. The urine alkaline. Sinapisms were ordered to be applied to the ankles.

* With this exception, the daily observations of temperature were made about 10 A.M., by the Resident Medical Officer, Mr. R. Carter, M.B.