static or oedematous small crepitation at the bases of both lungs was constant for some years.

In 1883, an unusually severe attack of great irregularity and tumultuous action of the heart, associated with an increased hypostatic oedema of both lungs, carried off the patient, when 47 years of age.

REMARKS.—I would ask attention to some aspects of this case: first, as to symptoms; secondly, as to treatment.

From 20 years of age to 47, the man was never free from one or another manifestation of what we vaguely term the gouty diathesis: eyes, joints, muscles, heart, skin, kidneys, showed obvious disease. What constitutes the gouty diathesis, whether mainly vito-chemical, or mainly central nerve-lesion, we are unable to state clearly; but we may be sure that, in such phenomena as that of the formation of excess of uric acid, or of sugar, neither a nerve-theory, nor a vito-chemical theory alone will afford approximative explanation; the nervous system cannot be separated from the general "energy" of vito-chemical changes, ever and everywhere happening in the system. Both our larger views of the living body, as a part of the great organic evolution, and our wider views of disease or the deviations of the normal rates and states, point us more and more to the wide correlations of disease: a hypothesis of the uric acid diathesis must embrace both vito-chemical and nerve-correlations. The nearer or more exact, but as yet unknown, correlations or conditions, which constitute the uric acid diathesis, existed in active process in this man for a period of thirty years, and, no doubt, were long prior "latent" in his system, and, one may say, affected with degeneration, many tissues of the body: more than the loss of sight, or the severe pain of passing stones, was the constant sense of prostration from small exertion, which arose mainly from the degenerated nervo-muscular power of the heart; and this was the eventual cause of death.

As to treatment, the man was a large feeder, and of large frame; he demanded a good supply of food. To have put the patient on a milk or other low diet, would have been to have, perhaps, lessened the number of calculi, but to have reduced the muscular power, increased the prostration, and hastened the degeneration of his tissues.

The use of brandy or whiskey has not been found to lead to the development of the uric acid or gouty diathesis, and the immense relief which they give to prostration, and the aid they often give to enable such a patient to eat a fair meal, make their administration, I believe, in many cases, a paramount duty of medical practice. As to vegetables, and lemons and fruits, I submit that there are often grave errors made in practice by debarring such articles. I have seen great seasonal prevalences of diarrhoea in warm climates, and great outbreaks of dysenteric-diarrhoea, successfully combated by lemons, tamarind, and fresh vegetables. The patient in question told me that, during thirteen years, he had never had any but liquid motions save when he faithfully took his dozen or two lemons weekly. Then only did his motions even approach a solid form.

I was the first of his medical advisers who ever prescribed a natural mineral water for him. The Celestins spring at Vichy contains about 80 grains of bicarbonate of soda in 35 ounces. The effect of that small amount of alkali on the formation of uric acid and on the recurrence of gout in the system, was incomparably greater than all the far larger doses of artificially prepared alkali, which he had previously taken.

How a natural mineral water should so powerfully affect the system, we are wholly unable to say. Science has not reached any general or precise laws applicable to the molecular states and energies of matter, when existent under vast pressure, and at great temperatures. It is under such conditions that the waters of Vichy are formed; still less can we offer any scientific explanation of the great power of such combinations of matter, and of such modes of energy on the living tissues. But no facts in therapeutics are better established than those of the great power on the system of natural mineral waters.

The hypotheses of the dynamic theory of heat, of the molecular condition of bodies, of the atomic constitution of bodies, and of the "specific" heat of elements, are all involved in the mere chemical study of a natural mineral water; and, *a fortiori*, such studies must be vastly more complicated when applied to organic living being. But you are aware that such natural mineral waters have a most complex composition, and this, even to our as yet early chemistry. One cannot but be struck with the correlation of the vast "specific" heat of lithium, and its great therapeutic power in the uric acid diathesis.

I have thought this case worthy of the attention of the Society, not only on account of its great practical interest, but further as suggestive of the very wide scientific correlations of the inorganic and organic, both in the normal or prevailing rates of health and in disease; and, further, as the case covered, in its varied symptoms, very much of the wide domain involved in the word "gout."

ON THE IDENTITY OF MEMBRANOUS CROUP AND DIPHThERIA.

By LESLIE PHILLIPS, M.D., Birmingham.

IF ever the debated point of the etiological identity of diphtheria and membranous croup be determined in the affirmative, as determined I believe it will be by future nosologists, there will still remain two very distinct clinical pictures of membranous laryngitis. One has the characters universally recognised as diphtheria, a highly infectious disease, having membrane on the throat and larynx, often with lymphatic glands much enlarged, albumen in the urine, and having paralytic sequelae. In the other picture, we have a disease of childhood, in which the patient, going to bed in his usual health, is seized suddenly in the middle of the night with laryngeal breathing; in this case, no glands are inflamed, and the disease is not generally considered infectious. If membrane be present in the larynx, the disorder is called membranous croup. Is this "membranous croup" diphtheria, or is it a distinct disease? Jenner, Semple, and other observers have replied that it is diphtheria; others have maintained that it is a distinct disease.

As a contribution in support of the first view, I publish the following case which has recently occurred in my practice, and which, since it is more interesting than creditable, I sincerely hope is unique.

On February 14th, 1886, my neighbour, Mr. Richard Smith, was called to see a little girl, F. B., aged 5 years. The child went to bed on the 13th, in her usual health. In the middle of the night, she was attacked with what is generally, if not universally, called "croup," namely, noisy laryngeal dyspnoea, with cough and fever; this continued to increase in severity up to the time Mr. Smith saw her, at 10.30, on the morning of the 14th. He immediately recognised the serious nature of the obstruction, and requested me to see the case with him. At 11 o'clock, when we saw her together, there was no membrane on the pharynx or fauces; noisy breathing was present, with much cyanosis and thoracic-abdominal recession; these conditions, and the advancing apathy, indicated that the trachea should be opened without delay. This I did, with immediate great relief, the patient rapidly becoming comfortable. On the 16th, some small pieces of membrane were coughed up through the tube, and the child died in the evening of that day. Death appeared to be due to asthenia, and not the direct result of want of air. She died, as many others do in diphtheria, slowly, with marked pallor, and foetor of the breath. At no time during her illness was there enlargement of the cervical glands. During the operation, some blood gravitated into the trachea; and Mr. H. North, of the Camp Hill Branch of the Birmingham Dispensary, who kindly assisted me, sucked up some of this by means of an india-rubber tube. He sustained no injury thereby. No other case of sore-throat appeared in the house, although there were several children and young persons resident therein, and notwithstanding no attempt at isolation was made.

On the afternoon of the 14th, I circumcised A., aged 18 months, for congenital phimosis, using the same instruments with which I had in the morning opened the windpipe of F. B. My usual custom is to pour boiling water on the instruments previously to doing any minor operation, not using carbolic acid, or any antiseptic. In the present instance, I remarked that the water did not boil, but, being pressed for time, I did not wait for this to take place; the water was hot, but not boiling. Four sutures secured the mucous membrane to the skin, and iodoform was freely sprinkled over the wound.

The case did well until the 18th, when a little membrane appeared over the incision in the prepuce; the sutures were removed. On the 19th, the membrane had extended over the glans, causing retention of urine; the penis was very oedematous. The membrane was peeled off, when the child immediately urinated. Iodoform was thickly and constantly applied.

On the 20th, much more membrane was peeled off. In the evening, the wound looked drier and better, but new membrane had formed in small quantity; this was again removed, and the wound brushed constantly with a solution of ten grains of perchloride of mercury in an ounce of glycerine.

On the morning of the 21st, retention of urine was again caused by extension of membrane over the meatus, and firm adhesion to the glans. This membrane was, therefore, again removed with forceps. It was noticed that the strong mercuric solution had not been nearly so effective in limiting the growth of membrane as the iodoform; this dressing was, therefore, again used. After this date, it was not found needful to again remove membrane.

Ododiform was constantly dusted on till the 23rd, when pellicle ceased to appear. During the attack, the constitutional symptoms were not severe, and the glands in the groins were not enlarged.

After I had incised the trachea, and before withdrawing the scalpel, I had passed a director into the tracheal wound as a guide, and in the afternoon I had used this same director in slitting up the mucous membrane in the circumcision. Although I had cleaned this director in the usual, and, as I then considered, careful manner, it is this instrument, with its curved edge, that I credit with carrying the infection.

I submit that this case presents a typical picture of the so-called "membranous croup;" that the diagnosis of any medical man who believed in the existence of that disease would be "membranous croup;" that the course of that disease was that of diphtheria; and, finally, that accidental inoculation on a wound produced diphtheria of that wound, with an incubative period of three and a half days. To call this a case of diphtheria, occurring suddenly in the night, is to give it the name, I believe, properly belonging to it. Why diphtheria should attack children in this sudden manner in the night, who were previously in good health, and why the disease, occurring in this way, appears to be less infectious than under other conditions, I do not pretend to say, nor is it pertinent to the present paper.

It is frequently stated that a point of importance in establishing a diagnosis of the zymotic nature of a sore-throat, is enlargement and tenderness of the cervical lymphatic glands. It is my constant experience that no diagnostic import is to be attached to this phenomenon, which has much to do with the individual, as well as with the disease. I have frequently seen undoubted diphtheria, and some fatal cases, in which no glandular enlargement was present; while it is an exceedingly common thing for the glands about the jaw and neck to be tender and moderately enlarged in simple sore-throats, such as superficial tonsillitis. In October, 1885, two cases of diphtheria occurred in an unsanitary house, one of them proving fatal after tracheotomy, which was performed by Mr. Jordan Lloyd; in neither of these cases was there a trace of tenderness in the lymphatic glands, nor could these be felt with the finger, yet there was no doubt about the nature of the disease.

CLINICAL MEMORANDA.

A CASE OF HYDATID OF THE LIVER, TREATED BY ASPIRATION, RESULTING IN CURE.

MARY S., a widow, aged 46, had, when I first saw her, been suffering for several years from a tumour of the right hypochondrium, accompanied by recurrent attacks of jaundice, which, after lasting a short time, nearly, but never quite, disappeared; and, while the attacks of jaundice lasted, there was intolerable itching of the skin. So great was the discomfort, that she was willing to submit to anything to get rid of her trouble.

On percussion, there was dulness down to a line two inches below the umbilicus; and the area of dulness extended across the abdomen to about three inches to the left of the umbilicus, shading off into stomach-resonance. The right lung did not seem to be encroached upon, the lung-resonance remaining normal in area behind, and being but slightly diminished in front. The abdominal wall bulged much over this area, but was quite smooth, and no unevenness of the surface of the liver could be felt. There was slight jaundice; the motions were pale, and the urine bile-stained; but there were no piles, large abdominal veins, ascites, or anasarca. Inconvenience, rather than pain, accompanied these symptoms. A thrill could be distinctly felt on palpation and percussion.

On August 12th, 1884, I aspirated, using antiseptic precautions, and drew off about six ounces of a pale straw-coloured liquid, of low specific gravity, after which no more would run through the needle, on account of some defect in the apparatus. An antiseptic pad was placed over the wound, and the abdomen firmly supported by a binder; and one grain of opium given every four hours.

The next day there was no rise of temperature, but slight pains were complained of in the right hypochondrium; but, on the whole, the patient was very comfortable. There was no oozing from the aspiration-puncture. There seemed very little difference in the size of the tumour. In a few days, the enlargement, with the concomitant jaundice and itching, began to disappear, the latter symptoms soon passing altogether away; and the case went on towards recovery without any bad symptoms.

She was kept in bed a week, and then got about, and in a month very little enlargement could be noticed; and now, nearly two years after the operation, the patient is quite free from her old trouble. On

examining the fluid drawn off, it appeared to be quite characteristic of hydatid fluid, but I saw no hooklets.

Had the aspirator not failed, I intended to have drawn off much more of the fluid, and was afraid that I had not drawn off enough to cause the death of the parasite and its absorption; but the event showed that I was mistaken. The needle was inserted about the centre of the enlargement. Curiously enough, the patient was also the hostess of another parasite, *tenia solium*.

WHEELTON HIND, M.D., B.S. Lond., M.R.C.S.

SURGICAL MEMORANDA.

REDUCTION OF DISLOCATION OF THE SHOULDER BY ABDUCTION.

It is, perhaps, because it is to no one's advantage to make himself the champion of those who have passed away, that methods of treatment practised generations ago are constantly being rediscovered, and attributed to the genius of modern thought. The subject of dislocations is one especially prone to this recurrent revelation. A deformity of a joint immediately resulting from an injury is just the kind of accident likely to attract the attention of early observers, and so we find dislocations very exactly described upwards of 2,000 years ago. When it is considered that the acutest surgical intellects have from this distant period been exercised in the direction of treatment, it is not difficult to understand how exceptional must be the kind of manipulation that has never yet been attempted. The commoner the injury, the greater is the chance for many to exercise their ingenuity upon it; and so we find the modes of reduction employed for dislocation of the shoulder more numerous than for any other joint. So numerous are they, that writers of text-books, being limited as to space, are compelled to select certain methods to the exclusion of others. But the moment a method is omitted, it is almost sure to be rediscovered. In the JOURNAL of May 22nd, under the above heading, Mr. Miall and Surgeon Beever relate cases reduced by "Dr. Neil Macleod's right angle traction-method." Now, Dr. Macleod's paper was published in January last, whereas the method alluded to has been practised for generations. In writing the article on Dislocations in the *Dictionary of Practical Surgery*, recently published, I attempted a classification of the different methods used for the shoulder, in order to condense as many as possible into a narrow space. If the article be referred to, it will be found that, under Lateral Extension, I have mentioned no less than six ways in which this may be affectually carried out, and, among them that advocated by Dr. Macleod, though, of course, previously to his advocacy.

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THERAPEUTIC MEMORANDA.

QUININE FOR TRAUMATIC NEURALGIA.

THE following brief notes may be read with some interest. That quinine cures neuralgia, especially of the æsthenic type, is a matter of ancient history, but it is not so generally recognised that it is useful in that following severe injuries.

CASE I. This was a case of dislocation of shoulder, by direct violence, with great bruising. After reduction, agonising pain set in, following the course of the brachial plexus. It was compared by the patient to the "gnawing of a dog." Sleep was quite banished. Chloral and opium, in full doses, gave no relief. A five-grain dose of quinine, however, gave almost instant ease, with some hours' sleep; and, although the pain returned, it was always controlled in the most remarkable manner by the quinine. Only three or four doses of the remedy were required.

CASE II. In a severe wrench of the shoulder, with rupture of muscular fibres, attended with great pain, especially at night, relief was quickly obtained by four-grain doses of quinine, given every six hours. The patient described the effect of the medicine as most rapid and soothing.

CASE III was one of a fall from a ladder, producing fractured rib and contusions. There was great pain, "not one wink of sleep," in spite of chloral (gr. xxv) and opium (℥ gr.). The patient was very violent and excitable. A fourth of a grain of morphine, hypodermically injected, calmed him somewhat; but the pain returned, and as I did not wish to push the opium, his kidneys being defective, I substituted two grains of quinine every four hours. After this, he got much better, and confessed that he could bear easily the little pain which remained. All these patients were full-grown men.

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