pump may be obtained by the use of a tube, used so as to act as a syphon, without any chance of danger to the patient. In a work of great merit, complicated with mathematical detail, by the late Dr. Arnott, published in 1829, the use of

a tube, without any pump attached, is suggested to act as a syphon in cases of poisoning, and as it can be used at all times without danger to the patient, I venture to call attention to it.

An india-rubber tube, with an opening near that extremity of the tube which is to be introduced into the stomach (being carefully passed down the œsophagus), is to be filled with water or some other bland fluid, the other end of the tube (which may be funnel-shaped) being held for the time *above the mouth*. As soon as the tube is full, pressure is to be quickly applied to the tube at its upper or outward opening; it is to be pinched quickly between the finger and thumb, and then turned downwards, when, acting as a syphon, it will empty the stomach. This process can be repeated as long as any indications are given that all the poison has not been withdrawn from the stomach. Of course, this only applies to soluble poisons, and in these cases only can such means be judiciously employed.

The power of the syphon is not great, but it is sufficient for the occasion, and is without danger. The power is measured by the difference only in the weight of the fluid in the two legs of the tube measured from the surface of the fluid in the stomach; the only requirement for its proper action being, that the outer orifice of the tube, during its use, should be held well below the surface of the fluid in the stomach. The syphon (or, more properly, siphon) is of old origin, supposed even before the Christian era. Its name—*σίφων*, a canal, or tube—in no way indicates its use. Various of our intermittent springs, in this country, are dependent on its action. In these cases the tube is naturally formed: it communicates with a naturally-formed chamber in the rock, which receives water from a constant spring, and as soon as the water in the chamber rises above the level of the bend in the syphon the chamber is emptied, to be again filled, and from time to time emptied. There is one of these intermittent springs on Giggleswick Scar in Yorkshire; and I have no doubt the “fluttering of the water” in the pool of Bethesda, described in the Gospel of St. John as the work of an angel, was of this character. In passing through the chamber, or before, the water might have gained, in solu-

tion, some salt favourable to the alleviation of certain cases of rheumatism, which would only be available on its exit from the tubes, before admixture with, or diffusion in, the body of the water in the pool.

Again, the stomach-pump is used for feeding insane patients. Now there is really no occasion for such an apparatus. A tube will answer all the purpose, provided care be taken to keep the outer opening of the tube well above the mouth of the patient. Gravity will exercise all the power required for the passage of liquid food into the stomach; and those dreadful fears, always expressed by the patient when the pump is used, will be altogether avoided.

Berkeley-square.

ON HYDRARTHROSIS AND ARTHRITIS OF THE KNEE, CONSECUTIVE TO LYMPHANGITIS OF THE LOWER LIMB.

BY PROFESSOR VERNEUIL,
SURGEON TO THE Pitié HOSPITAL AND PROFESSOR OF CLINICAL
SURGERY OF THE FACULTY.

It is my desire to draw attention to a variety of affections of the joints which I do not believe has yet been described, but which cannot be very rare, as in my single practice I have met with it five times. I mean the propagation, to the synovial membrane of the knee-joint, of a superficial inflammation, originating in the subcutaneous lymphatic *réseau*, and assuming the form of lymphangitis of the large vessels, or that of erysipelas. Owing to the precision and the distinct character of its etiology, and the gravity of its prognosis, I consider that this variety merits special mention.

Firstly, I will give a brief summary of my five cases.

Some twenty years ago I was called by one of my colleagues to see a patient living in the neighbourhood of Paris. He was a merchant, fifty years of age, much broken down by excesses of all sorts, and had been obliged to remain in bed for a fortnight on account of lymphangitis of the leg. The mischief had begun by a small excoriation of one of the toes which had become irritated by walking. The inflammatory accidents had developed suddenly, the limb was covered with red streaks, and a certain number of small superficial abscesses had formed around the inflamed lymphatic vessels. When I saw the patient several of these abscesses had already been opened, but there remained many more ready for incising, and others in course of formation. Two of these collections were of the size of a large olive, and were situated on the internal aspect of the knee. I incised them obliquely, and let out a considerable quantity of phlegmonous pus. I adopted the same treatment with the other collections, which were situated on the leg and thigh. On subsequent days other incisions became necessary; nevertheless, matters seemed to be progressing as favourably as the debilitated condition of the patient would permit, when suddenly the knee became the seat of violent pain and considerable tumefaction. These new symptoms had begun on the inside of the knee, round the spot where I had opened the two abscesses a week previously. Purulent arthritis set in with great rapidity, in spite of every means we could adopt. Different operations, including amputation, were proposed to the patient, but all were declined. The general condition became worse and worse, and the unfortunate patient died three weeks after the articulation had suppurated.

The second case came to my knowledge a few years later, and was that of a girl fourteen years of age. The patient was a slim, delicate, and nervous child. The nail of her big toe had fallen off after a contusion it had sustained, and a small collection formed underneath, which opened spontaneously. Shortly afterwards diffuse lymphangitis covered the whole limb. The swelling soon subsided, but several circumscribed collections were formed successively. The doctor attending the case incised these little abscesses, amongst which was one situated on the inside of the knee. On the next day the patient complained of pain in her knee, which was swollen. I was called in, and believed at the

time that the articulation had been opened. Purulent arthritis followed its course in spite of all we could do. The pus diffused into the thigh, the leg, and the popliteal space, the ganglions of the groin began to suppurate, and a purulent collection formed in the internal iliac fossa. I proposed amputation of the thigh, but the family refused all active intervention, and the child died after three months' incessant suffering.

A man, forty-eight years of age, very thin, and of a cachectic appearance, came under the care of my friend, M. Oulmont, at the Hôpital Lariboisière, for an acute malady presenting all the symptoms of typhoid fever. During the course of the disease a gangrenous patch formed on the dorsal aspect of the right foot, and when this fell one could see the tendons and ligaments of that region as well as some of the metatarsal bones. It was in that condition the patient was passed into my wards. I tried to improve the general health, and at the same time cleansed the wound, which had rather an ugly appearance. The patient was making slow progress when suddenly he had a rigor accompanied with vomiting and a high temperature. Shortly after traces of lymphangitis were to be seen starting from the wound on the foot. The red streaks were distinctly visible on the anterior and internal aspects of the leg, inside of the knee, and all along the course of the femoral vessels in the thigh. Rest, emollients, and mercurial frictions were ordered along the inflamed parts, and soon afterwards all the mischief disappeared except near the knee, where some lymphatic vessels became more and more swollen, and finally gave rise to a badly circumscribed phlegmon occupying the whole internal aspect of the joint. The articulation remained healthy for a while, but two days after, just as I was about to incise the phlegmon, the inflammation was communicated to the synovial membrane. I thought at first that it was only a simple hydrarthrosis owing to the neighbouring inflammation, but when I had incised the abscess I found that the contents of the articulation, also composed of purulent matter, poured through the cutaneous incision. This complication supervening in a man already worn out, and who was passing a quantity of albumen in his urine, rendered the case hopeless. With much regret I proposed amputation, but this was refused, and the patient died at the end of eighteen days. The post-mortem examination showed a strongly injected synovial membrane, destroyed cartilages, and the spongy tissue of the bones exposed. The ligaments were softened and ruptured.

I met with the fourth case in 1869, whilst I was at Lariboisière Hospital. A man, thirty years of age, who had always enjoyed good health, though of a rather sickly appearance, came under my care in the month of December for an extensive swelling of the foot and leg of some days' standing. The symptoms were those of phlegmonous erysipelas, and began round an ulceration which had been caused by a badly-fitting boot. The temperature was very high, the abdomen distended, the tongue dry, there was intense thirst—in fact, the general condition was very unsatisfactory. Rest, elevation of the limb, mercurial frictions, purging, and sulphate of quinine, ameliorated this state, and all that remained was a phlegmon of the big toe, which opened spontaneously near the interphalangeal articulation. At the end of a few days the patient was able to walk about the ward. This improvement did not last long. Without any known cause the general symptoms suddenly returned, and the limb became again swollen, but this time as high up as the groin. The knee became extremely painful, considerably aggravated by the slightest touch or movement. It was easy to see that arthritis had set in, complicating the erysipelatous swelling. An appropriate treatment caused the swelling of the limb again to disappear, but the knee still remained enlarged and fluctuating, being manifestly affected with hydrarthrosis. Blisters were applied round the joint, and the fluid diminished a little in quantity; but the general condition of the patient remained unaltered, the temperature continued high, and soon an eschar formed over the sacrum, while an attack of pneumonia of septic nature came on and caused a fatal termination of the case in the latter part of February. At the post-mortem examination a large quantity of serous fluid, slightly clouded with pus, was found in the articulation.

My last case occurred at the beginning of the year 1878. A tall, thin, sickly-looking man, about sixty years of age, came under my care for subacute hydrarthrosis of the right knee of two or three days' standing, which gave him a little pain and caused him to limp. On examining the limb, I

saw on the dorsal aspect of one of the toes a slight wound covered with a crust, and also an oedematous swelling of the leg, with two or three red fluctuating spots; on the inside of the knee were two lymphatic abscesses, typical in nature. My diagnosis was hydrarthrosis following on lymphangitis. This last-named affection had disappeared, and only left the circumscribed abscesses; but, on questioning the patient, we found that about ten days previously his leg had suddenly become swollen, painful, and streaked with red lines. These symptoms had been accompanied by malaise, fever, and rigors. I placed the limb in an apparatus, opened the three little abscesses of the leg, and contented myself with painting the two situated inside the knee with tincture of iodine. In a week these two collections disappeared, as did also the hydrarthrosis, and the following week the patient left for the convalescent home at Vincennes.

The five cases I have related present the greatest analogy one with the other. A small wound on the foot is the commencement; then, in four instances, lymphangitis of the large vessels takes place, with formation of circumscribed abscesses; and in the fifth case we have a kind of phlegmonous erysipelas very much resembling diffuse lymphangitis. With the exception of the little girl, who was rather sickly, the patients were all anæmic, weak, and of a poor appearance, consequently would be favourable subjects for diffused inflammations. In each case where we were called upon to watch the invasion of arthritis, we remarked that the symptoms came on very suddenly, and with great intensity. In three cases the arthritis was purulent from the beginning; in the two others the fluid remained serous or sero-purulent. In four cases arthritis was preceded by lymphangitis and the formation of circumscribed abscesses. In the fifth case the articulation seemed to become affected at the same time as the leg became tumefied.

Several conjectures may be made upon the mode of transmission of the inflammation. One may suppose, for instance, that the lymphatic vessels coming from the synovial membrane and opening into the larger vessels become inflamed from their termination down to their point of origin in the synovial membrane. This mode of propagation is met with in superficial lymphangitis of the limbs. It may also be conjectured that, as the subcutaneous lymphatics are only separated from those contained in the synovial membrane by a thin layer of fibrous tissue, the inflammation forced that barrier. There is no reason to doubt the possibility of the opening of one of the lymphatic abscesses into the articulation. The purulent arthritis continues its course, which is more rapid if the patient is in a debilitated condition. It is thus that the death of the first three patients is accounted for, having refused all operative interference which might possibly have saved their lives. Hydrarthrosis naturally offers much less cause of apprehension, and in our last case we saw it disappear very rapidly. The diagnosis is generally easy, for it will always be possible to recognise the lymphangitis or the initial abscesses.

I have little to say about the treatment. The only lesson to be gained from these cases as to the treatment is that lymphangitis situated on the inside of the knee should arrest special attention. Early incisions are also, I believe, an advantage.

As yet all my cases have had reference to the knee-joint, but I am quite ready to admit that other articulations may become the seat of similar affections.

Paris.

A CASE OF URTICARIA HÆMORRHAGICA.

By DYCE DUCKWORTH, M.D., F.R.C.P.,

ASSISTANT-PHYSICIAN TO ST. BARTHOLOMEW'S HOSPITAL; EXAMINER IN PRACTICE OF PHYSIC IN THE UNIVERSITY OF EDINBURGH.

IN THE LANCET of Oct. 7th, 1876, I described a case of one of the rarer forms of urticaria—viz., *U. bullosa*,—and I now have to record some brief notes of an equally uncommon variety which has been termed “*hæmorrhagic urticaria*.” The affection was strictly limited to the helices of the ears in the following instance.

The patient was a woman, E. A.—, aged twenty-seven, married, without family. On the 14th of August last she came for advice to the hospital, and was seen by my colleague Mr. Marsh, who passed her on to me. The history was that six weeks previously her ears (the helices) had