during life. From the tapping upon December 7th till February 14th, a period of 68 days, 2,110 ounces were removed, or rather more than 31 ounces per day. The extraordinary fact must be noted that though 117½ pints were removed, the patient did not lose weight. He weighed 79½ pounds upon December 29th, and 79½ pounds on February 14th. The weight of chyle secreted amounted to 150 pounds, or nearly double that of the patient's body. It is not possible that there could be any error in the weighing. It should be borne in mind, however, in reviewing the generally accepted doctrine of the importance played by chyle in the maintenance of the nutrition of the body, in the light of these figures, that the presence of the tubercle must be considered.

It may appear absurd to regard miliary tubercle as a possible factor in preventing loss of body-weight; but when one thinks of the millions of little tubercles, there must be some ponderous importance attached to their presence. It appears, therefore, that the general and extensive infiltration might have made up for the wasting which must have been at work. Though the adipose tissue was scanty, it was not so scanty as may sometimes be seen in apparently healthy lean folk. The patient was imbibing 90 ounces of fluids, and passing less than 20 ounces in his urine; of the balance, only 30 ounces went to make chyle. The observation made about the milky odour of the chyle was often verified by numerous members of the clinical class from time to time, and it is probable that the milk passed with little change through the lacteals.

Attention has been drawn recently to the pathology of chylous ascites by Dr. M. Letulle in the *Revue de Médecine*. This observer is strongly of opinion that such cases are always caused by peritonitis, independent of any opening or connection with the lacteals; and he espouses the view which was promulgated by M. Gueneau de Mussy, that the purulent products of the inflammatory action are slowly transformed with the leucocytes into a granulo-fatty emulsion. After a most exhaustive survey of the whole literature of the question, he formulates the following startling propositions. 1. All cases of chyliform ascites known up to the present time, and followed by necropsies, are cases simply of chronic tuberculous, cancerous, or neo-membranous peritonitis. 2. The granulo-fatty retrogression of the inflammatory products is sufficient to hold all the emulsified fat in suspension in the peritoneal serosity.

A glance at these specimens, or a study of the woodcut, answers these fanciful theories for all time to come. Debove maintained, but without any reason, that emulsified fat could be formed in the serous cavities, "qui ne provient ni d'une transformation des globules de plus ni d'un épanchement de chyle."

Having once seen the cause, in a case like this, so clearly demonstrated, one is justified afterwards in assuming that there is probably a small aperture in some of the minute lacteals, which, though not visible, can still permit the direct escape of the chyle.

ON EARLY SYPHILITIC EPIDIDYMITIS.

By ARTHUR COOPER, M.R.C.S.Eng.

WHEN syphilis attacks the testis, it rarely does so during the so-called secondary period; and when this organ does suffer, it is well known that, in nearly all cases, the body of the testis is first affected, and that the epididymis either remains free, or only becomes implicated later on, by extension of the morbid process from the testis itself.

The much rarer affection now to be considered differs from ordinary syphilitic orchitis, in that the epididymis is especially attacked, and that it occurs in the earlier portion of the secondary stage. Syphilitic epididymitis appears to have been first clearly described in 1863, by M. Dron of Lyons, who reported sixteen cases (*Archives Gén. de Médecine*, 1863, vol. ii, pp. 513, 724). In 1869, and again in 1875, M. Fournier (*Annales de Derm. et de Syph.*, 1869; and *Du Sarcocoele Syphilitique*, Paris, 1875) wrote on the subject, and referred to eight cases which had come under his own observation. Since then, most authors have included epididymitis among the consequences of syphilis, and the reality of its occurrence is now generally accepted. It should be mentioned, however, that no less an authority than the late Professor Sigmund, of Vienna, stated that he had never seen such a disease, and doubted its existence. It is worth notice that, during the twenty years which have elapsed since the publication of M. Dron's paper, but little appears to have been written on the subject in England. This is pretty well shown by the fact that, in the *Medical Digest*, the only reference on this matter relates to an abstract, in the *British and Foreign Medico-Chirurgical Review*, of M. Dron's paper mentioned above. It may be well, therefore, before giving the notes

of a case which I believe to be of this kind, to refer very briefly to the chief features of the affection.

First, as to the time of appearance: this seems to be nearly always within the first year, and most commonly within about the first six months. Of five of Dron's cases in which this point was ascertained, the earliest was two months, and the latest five months, after the appearance of the initial lesion, the average being three and a half months. Six of Fournier's eight cases occurred within seven months, one at the ninth, and one at the eleventh month, after the initial lesion. One or both organs may be attacked. In nine of Dron's sixteen cases, both were enlarged at the same time. The degree of swelling is usually unequal on the two sides. The enlargement always begins in the globus major, and hardly ever extends beyond it. Fournier has never seen the whole epididymis affected. In one of Dron's cases, the globus minor, and in two, the body of the testis, was enlarged. The scrotum and cord remain free. Only once in Dron's cases was the scrotum adherent for a short time. The swelling is indolent, usually painless, or nearly so, and rapidly subsides under general antisyphilitic treatment. The significance of the affection is doubtful. Julien (*Maladies Vénériennes*, 1879, p. 776), however, thinks it indicates a severe attack of syphilis. The morbid anatomy is unknown. There appears to be no *post mortem* examination on record, unless a case of gumma of the epididymis mentioned by Dr. Greenfield (*Pathological Transactions*, 1877, p. 225) were of this kind.

CASE.—Mr. P. H., aged 21, came under my care on August 26th, 1882, with two venereal sores of the inner prepuce, which had been first noticed five days previously. The date of contagion could not be ascertained. At this time, the sores were suppurating, and neither induration of the sores nor enlargement of the glands was sufficiently marked to make the diagnosis certain. A week later, both signs were characteristic, and mercury was at once begun. Roséola occurred in due course, and was followed by mucous patches in the throat and small fissures on the tongue. A few days after a visit to me on October 20th, the patient, whilst hunting in one of the midland counties, broke his left forearm; and it was in the early part of November (that is, about two months and a half after the appearance of the initial lesion), while lying up on account of his injury, that he first noticed swelling, with some amount of pain, in both testicles, but especially the left one. He was sure that the organs were not hurt in the accident, and he had no urethral discharge. The next time I saw him was on December 21st, consequently five or six weeks after the testes began to enlarge, and the patient said their condition remained pretty much as at first. He had been taking mercury (one grain and a half of mercurial pill three or four times a day) since I last saw him. On examination, the head of the left epididymis was found to be considerably enlarged. The swelling involved the whole globus major, and the bulk was about equal to that of a quarter of a Tangerine orange; the usual form of the organ was preserved, and the surface was moderately smooth. On the right side, the swelling was similar in every way, except that it was only about half the size. The swelling was strictly limited to the globus major on each side, the body and tail of the epididymis being of natural size and consistence. The scrotum and spermatic cords were unaffected. Only slight discomfort was caused on handling the parts. There was no urethral discharge. Elsewhere, also, there were signs of active syphilitic growth—namely, a prominent tubercle on the glans penis, a considerably raised scaly patch on the abdomen, and a very large and prominent mucous tubercle on the dorsum of the tongue. The pills (four a day) were continued until December 30th, on which date, as there was no improvement in any of the symptoms, the pills were left off, and a mixture containing one-twelfth of a grain of perchloride of mercury and five grains of iodide of potassium, to be taken three times a day, was prescribed. This was taken regularly until February 21st, 1883, when he next came to town. Both epididymes at that time were perfectly natural in size and to the touch, except that the left globus major was perhaps very slightly thickened; this, however, was only perceptible on carefully comparing the two organs, and would not have been noticed under other circumstances. The signs of active growth elsewhere had also disappeared. The patient had remarked that his testicles began to get smaller about a week after his visit to me on December 30th. They had given no further trouble up to the time I last saw him, in December 1883.

REMARKS.—In any case of enlargement of the epididymis, the first thing to be looked for is, of course, urethral irritation of some kind. Here there had been none for a long time; but it should be mentioned that there was a history of swelled testicle on the right side, with gonorrhœa, in 1879, and of a blow on the scrotum from a cricket-ball in 1881. That the affection was due to syphilis, seems

clear from the fact that it appeared without any other known cause, and whilst the patient was laid up on account of his accident; from the indolence of the swelling, and its strict limitation to the globus major in both organs; from its coincidence with signs of active syphilitic growth elsewhere; and, finally, from the effects of treatment, by which tubercle and cysts were also, of course, excluded. The extent of the swelling was greater than in most recorded cases.

French writers say a good idea of the affection would be gained by imagining that a pea or a haricot bean, or, at most, an olive, had been introduced into a healthy epididymis. In the case above recorded there was no circumscribed nodule, and the natural form of the organ was maintained.

Although the exact pathology is unknown, it would appear most probable that the enlargement is due to the production of the ordinary syphilitic new growth, and that here, as elsewhere, this may develop in a circumscribed or in a diffused form, the present case being an example of the latter variety. The exact seat of the morbid growth has been thought to be the connective and not the tubular tissue, apparently because, in one of Dron's cases, where both organs were affected, spermatozoa were found in the semen. Dr. S. W. Gross (*On Impotence*, etc., 1881, p. 93), however, has met with a case in which they were absent. This would lead to the inference that here, as in other parts of the body, it is greatly a question of extent of the new growth that determines to what degree, if at all, the function of the affected organ is interfered with. The circumscribed variety appears to be more frequent than the diffused; this might, perhaps, partly account for the supposed rarity of syphilitic epididymitis; for one can easily understand that an indolent nodule, of the size of a pea or a bean, might escape notice. Enlargement to the extent above noted, however, could hardly be overlooked.

Lastly, though not a very rare event in syphilis, it is worthy of remark that the various signs of active growth showed themselves while the patient was taking mercury, that they all appeared to be uninfluenced by moderate doses of that drug alone, and that all rapidly subsided under a combination of iodide of potassium with corrosive sublimate. Probably it might almost be laid down as a rule—at least, it is one that I have found very useful to bear in mind—that, whenever syphilis shows a tendency to excessive growth, iodine, in some form, will be likely to do good, no matter whether the stage of the disease be called secondary or tertiary.

CLINICAL MEMORANDA.

UNUSUAL CAUSE OF FATAL PERITONITIS.

AT 10 P.M., I was summoned to a man, with the following history. He was fairly temperate in habits, and had always enjoyed good health, with the exception of a slight attack of dysentery three years ago; he, however, since suffered from dyspepsia and constipation, necessitating care in his diet. He had, a short time before I saw him, eaten freely of veal, mince-pies, plum-pudding, etc.; and, shortly afterwards, was seized suddenly with intense pain in the abdomen. When I saw him, he was doubled up in great agony, and pressing his abdomen. Examination revealed nothing save great pain and tenderness in the umbilical region. I gave an inhalation of chloroform, and a hypodermic injection of half a grain of morphia. The next morning, when I saw him, he had symptoms of peritonitis; he died the same evening. The necropsy showed three strictures of the small intestine (jejunum); in front of the third was a perforation at the site of an old cicatrised ulcer. Through this perforation, about a dozen currants had escaped into the peritoneal cavity. The case is interesting from the difficulty of making an immediate diagnosis, and also from the unusual position of the ulcers and strictures. It would be interesting to know, if this lesion could have been diagnosed, what good, if any, might have been done by abdominal section.

NORMAN REID, Army Medical Staff.

EQUINIA MITIS.

SOME weeks ago, I had under treatment a carter, aged about 45, whose ailment seemed to come under the above category. About six weeks before I saw him, he had been working an old horse affected with grease, and had occasion frequently to manipulate the diseased parts; and, for some time before taking to his bed, he had suffered from what he took to be rheumatic pains in various parts of his body. At last he was obliged to give up work, from the severity of the pain in the lumbar region and along the course of the right sciatic nerve; and, after two days in bed, an eruption appeared on the outer aspect of the

right leg, extending from about six inches above the knee to within four inches of the ankle-joint, and partially invading the popliteal region. This consisted, at first, of large and small bullæ, speedily succeeded by a profuse eruption of pustules, arranged in small clusters upon a base, which speedily swelled, presenting the appearance of a large crop of small carbuncles, which discharged pus, and some of them cores, through perforations of the skin, where the pustules had been. These perforations had the appearance as if the skin had been riddled with pellets. Immediately before and during the earlier period of the eruption, the leg was much inflamed and swollen, and there was considerable pyrexia, with severe headache, nausea and sleeplessness. The glands in the right groin were tender and swollen for some days, but did not cause much trouble. There were only one or two more inflamed pustules on other parts of the body, and I was inclined to regard it as a form of herpes zoster, aggravated by equinia-poisoning. That it was infectious, was soon proved by his wife, who attended upon him, being attacked by it, though less severely. An angry pustule appeared upon the back of one of her little fingers, attended with great pain, redness, and swelling, which began rapidly to extend over the hand, but was checked by a free incision over the pustule, followed by fomentations and poultices. This was succeeded by an erysipelatous blush round the left eye, with a small abscess over the inner canthus. The husband was confined to his bed for three weeks, but has now entirely recovered. The treatment in his case was iron and quinine, and chloral, with linseed and charcoal poultices, and carbolic and lead lotions. The wife, although feeling very much out of sorts, was never laid up.

BENJAMIN STRACHAN, M.B., Monkwearmouth.

ACUTE MENINGITIS IN CONNECTION WITH INTRANASAL DISEASE.

DR. McNAUGHT has called attention to an interesting class of cases. I have alluded to them in a special chapter in my book on *Diseases of the Nose* (pages 349-350), where Dr. McNaught will find that others have also called attention to the same kinds of cases; namely, Dr. Abercrombie in 1845, and more recently Sir William Gull and Dr. H. G. Sutton. The important point in the clinical aspect of these cases is that the intra-cranial symptoms come on very insidiously, and that the nasal disease is often quite overlooked, so that the appearance of meningitis seems inexplicable, or is attributed to some other cause.

As instances of intra-cranial disease complicating abscesses of the frontal sinus and antrum, I may refer to Cases xvi, xxxiv, and xxxvii, in the appendix of my book. W. SPENCER WATSON.

VARICOSITY OF THE LINGUAL VEIN.

I HAVE noticed lately several articles on the subject of varicosity of the branches of the lingual vein in connection with disease of the cerebral vessels. It may interest some to know that I have, at the present time, a patient under my care who exhibits this condition of the terminal branches of the lingual vein in a very marked degree; I have, moreover, attended him during the last few years for slight apoplectic attacks, pointing to degenerative changes in the cerebral vessels. He is, however, of an advanced age, being over 80 years, and shows most of the usual signs of senile degeneration, but his superficial arteries are neither so tough nor tortuous as to be in any way suggestive of a special tendency to disease in the vessels of the brain. M. GREENWOOD, Junior, M.R.C.S., L.R.C.P. Lond.

THERAPEUTIC MEMORANDA.

A REMEDY FOR GOUT.

I FIND that the solution of the biniodide of mercury in potassic iodide, known as the "Edinburgh mixture," is of great service in the treatment of gout. I prescribe as follows: *R. Solutionis hydrargyri bichloridi (B.P.) ʒvi; potassii iodidi ʒss; infusum quassie vel calumbæ ad ʒvi. Misce et solve; fiat mistura. Signetur: capiat æger semunciam secundis vel tertiis horis.* If there be much pain, I add two-minim doses of the solution of morphia when admissible, or, in preference, five-grain doses of chloral and bromide of potassium, with simple syrup.

It is hardly necessary for me to state that, when congestion or actual inflammation, not only of the kidney, but of other internal organs, exists, this medicine should not be prescribed.

C. R. ILLINGWORTH, M.D. Ed.