hanging on month after month under ordinary treatment, are enough to lead us to try anything which promises better success. But I have never been able to thoroughly test their treatment, simply because patients will not submit to such temporizing. As all know so well that by the rather vigorous treatment already advised, the course of gonorrhœa can be materially shortened. I prefer to give patients the benefits of it. At the same time, the experience of these surgeons may induce us to *inquire in many cases whether medication has not been carried too far.*

Obstacles to Success.—A mistake, generally committed by patients who treat themselves for gonorrhœa, and by some physicians, especially in the early years of their practice, is over-medication and a neglect of the general health. Nothing is more common than to meet with a patient, suffering with gonorrhœa of several months' standing, who has been kept on low diet, and been taking various preparations of copaiba and cubebs, using a variety of injections often exceedingly irritant in their composition or strength, and who is now run down, weak in body, and despairing in mind. His digestion is impaired, his appetite gone, and his clap as bad as ever. Let such a man lay aside his capsules, pills, powders, mixtures and irritant injections; give him substantial food, and a tonic, as quinine or iron, and his disease will probably begin to improve at once, and subside entirely in the course of a few days or weeks. Under any circumstances, you will have removed one great obstacle to a cure, and, if the discharge do not entirely disappear, it is probably kept up by some local complication, which can now be attacked with a prospect of success.

Independently of debility, the chief causes of the continuance of a gonorrhœal discharge are the existence of stricture and irritation of the neck of the bladder. It is desirable in every obstinate case to ascertain if the former be present by the passage of bulbous sounds, and, if any obstruction be met with, appropriate treatment should at once be adopted; but, even in the absence of stricture, the introduction of an instrument into the bladder two or three times a week has a most beneficial effect upon old cases of clap.[1]

It sometimes happens that a case of gonorrhœa has been going on well for a week or ten days under the use of the anti-blennorrhagics and injections—the discharge has almost entirely ceased, and the patient considers himself nearly well, when suddenly a relapse takes place; the discharge is once more thick and purulent; the scalding in making water returns; the injection, which has scarcely been felt for a number of days, excites considerable pain, and at the same time the patient has a frequent desire to pass his urine, and suffers from an uneasy sensation in the perineal region. The latter symptoms denote that the disease has extended to the deeper portion of the urethra, and that there is irritation or inflammation of the neck of

[1] See chapter on Gleet.

the bladder. Under these circumstances, the case requires to be very carefully watched and judiciously treated. Unless great care be used, the inflammation may extend through the vas deferens to the scrotal organs, and swelled testicle ensue; or the prostate gland may become involved. If irritant injections now be used, they will prove inefficient and will aggravate the symptoms. It is best to suspend the use of injections altogether, and to resort to the exhibition of alkalies and sedatives, as recommended in the inflammatory stage, until the subsidence of the symptoms shall enable us to resume direct treatment; the patient should also be particularly careful with regard to exercise. Canada turpentine, the product of the *Abies balsamea,* will also be found of essential service in these cases. It may be made into pills, containing five grains each, of which from six to twelve should be taken daily. I have also been much pleased with the effect of tincture of ergot, administered in drachm doses three times a day.

Treatment of Special Symptoms.—It remains to speak of the treatment of certain special symptoms which may attend a case of gonorrhœa, and one of the most annoying of these is *chordee.* Various sedatives are employed for its relief, among which camphor holds the first rank. This may be given in the form of a pill, combined with extract of lettuce or opium, as in the following formulæ:

℞. Lactucarii,
Pulveris Camphoræ, āā ℈ij . . . . 2|60
M. ft. pil. xx.
Dose.—Two at bedtime. (Ricord.)

℞. Pulveris Camphoræ, ℈iss . . . . . 2|00
Pulveris Opii, gr. x . . . . . |65
M. ft. pil. No. x.
Dose.—One or two. (Ricord.)

We have also used with good result the monobromide of camphor in doses of three grains (gram 0.20), either made into a pill with the extract of hyoscyamus or dissolved in the tincture of the same.

Mr. Milton prefers camphor in a liquid form in large doses. He directs the patient to take one drachm of the tincture in water on going to bed, and every time he wakes up with chordee, to repeat the dose. He states that after the continuance of this treatment for two or three nights all tendency to chordee disappears.

Dr. Ed. R. Mayer[1] says "full doses of gelsemium at bedtime are the most certain preventive of chordee."

Lupuline is another remedy of undoubted power in allaying the excitability of the genital organs, and possesses the advantage over opium that it does not constipate the bowels. It may be given in doses of fifteen grains, triturated in a mortar with sugar. This quantity is to be taken before going to bed, and may be repeated one or more times in the night if required.

[1] "Specific Medication," a paper read before the Luzerne County Medical Society, at Pittston, Pa., September 13, 1876.

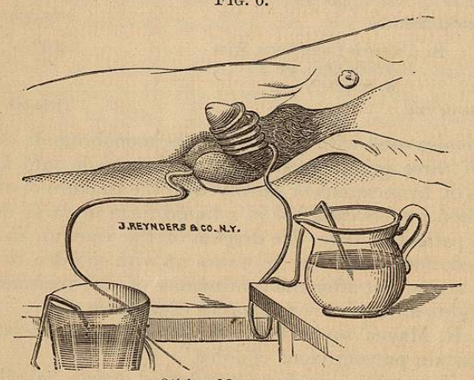
Of the above means of relieving chordee, I regard Mr. Milton's method of giving camphor, if it do not disagree with the stomach, and the administration of lupuline, as the best; yet none of the remedies mentioned can be relied upon with certainty of producing the desired effect, for they all fail in many instances. Much may be accomplished by directing the patient to avoid eating or drinking for some hours before going to bed, to be careful to empty his bladder and rectum, and to sleep on a hard mattress, with but few bed-clothes over him. The position in bed is also of importance, since erections are much less likely to take place when lying upon the side than upon the back. Suppositories of the extracts of opium or hyoscyamus and belladonna introduced into the rectum may often be found of service.

Another means of relief which I have found highly successful is bathing the genital organs in very hot water directly before going to bed. The reaction after the application of heat has a sedative effect, and in this respect has exactly an opposite influence to that of the cold lotions which are sometimes advised.

Many French surgeons recommend leeches to the perinæum, and in some instances, particularly where the disease has invaded the deeper portion of the urethra, much benefit results.

Treatment of Hœmorrhage.—A slight hæmorrhage from the urethra in gonorrhœa is often very beneficial, since it relieves the congested condition of the vessels. Even when so great, though still moderate in amount, as to require precautionary measures, it will usually be sufficient to put the patient in bed with his hips elevated, and apply ice or cloths dipped at short intervals in ice-cold water to the genitals. If at hand, the ingenious "cold-water coil" of Dr. Otis, represented in Fig. 6 may here be employed.

FIG. 6.



Otis's cold-water coil.

In severe cases we are obliged to resort to urethral injections of very cold water, or of water with the addition of some strong astringent as the perchloride or persulphate of iron. These means will rarely fail, but we may be led to try the effect of a full-sized sound, or a piece of a flexible catheter introduced into the canal and a compressive bandage around the penis. A compress firmly applied by a bandage to the perinæum or Otis's perineal tourniquet will take the place of this when the blood comes from the deep urethra. Hæmostatics, especially ipecac or ergot given internally, will do no harm.

As an attack of gonorrhœa is passing off, it not unfrequently happens that the discharge assumes an intermittent character, entirely disappearing for a few days, and then without apparent cause reappearing for a day or two. This may occur several times in succession, and in some cases that I have witnessed, it has assumed great regularity. The surgeon should, of course, assure himself that the return of the symptoms is not due to imprudence, and, if satisfied of this, is generally safe in telling the patient that his disease will soon cease entirely to annoy him.

It is important to continue treatment for some days after all traces of the disease have passed away, since relapses are very readily induced. They are usually brought on by the patient's neglecting the rules with regard to exercise, diet, etc., already laid down, or by his indulging in sexual intercourse. He should be particularly cautioned on these points, and should be directed to continue his medication, both external and internal, in decreasing doses, for at least ten days after the lips of the meatus have ceased to be glued together in the morning. Until every symptom of gonorrhœa has disappeared for this length of time, the patient cannot consider himself as securely well, and should still be cautious in his habits for a fortnight longer.

After the entire cessation of the discharge, patients sometimes complain of abnormal sensations in the genital organs, which they describe under the names of "tickling," "crawling," and sometimes "lancinating," and which may be nearly constant or intermittent at intervals of several hours or several days. These sensations in most cases are not dependent upon inflammation or organic changes in the part, but are of a strictly neuralgic character. They are best relieved by the passage of a full-sized sound every few days; and they are much less felt when once the mind it set at rest with regard to any danger of a return of the gonorrhœa.

The reader may be interested to know what is the *average* duration of treatment required in the hands of the best surgeons for the cure of gonorrhœa, laying aside those cases which are seen in the first stage, and which are speedily cured by the abortive method. This may be estimated at four to six weeks. Greater success, on the average, is probably not attainable by any means with which we are at present acquainted.

Although I have been led in the preceding pages to criticise the expectant treatment as recommended by some French surgeons, yet I cannot close this chapter without a quotation from Fournier, which

contains much sound common sense. He says: "We meet with cases of gonorrhœa which defy all treatment. Shall we in these cases persist and struggle on, piling one remedy and one injection upon another? I believe that this practice will more frequently aggravate the disease than cure it. In my opinion it is better to desist, to stop all medication, to encourage the patient and leave to time what art has not been able to accomplish. I am not afraid to say that there are many patients, who, after exhausting all the resources of therapeutics, get well through time alone. Moreover, in most instances, the disease subsides into a mere inoffensive oozing from the canal. It is better to put up with a small evil than to expose one's self to a worse one by seeking a cure which remains uncertain. Now there can be no question but that medication continued for a long time, and incessant irritation of the urethra, may result in serious accidents and in grave complications. In the face of this danger springing from the treatment, the physician must know when to stop in time. Unable to cure in every case, he should at least not make the case worse."

Within the past few years a number of microscopists have discovered a micro-organism in the pus of gonorrhœa, which is termed by Neisser, who made the first observations in 1879, *micrococcus gonorrhœæ*. This organism, it is claimed, is only found in the pus of gonorrhœa, whether from the urethra, vagina, or conjunctiva, and is peculiar in its size, shape, and mode of reproduction. Neisser's observations have been confirmed by Ehrlich, Gaffky, Aufrecht, Löffler, Leistikow, Bockhart, and a number of others. Dr. Sternberg, of the United States Navy, however, thinks that this organism is not peculiar to gonorrhœal discharges, but that it is the *micrococcus ureæ* of Pasteur. Bokai, of Pesth, claims to have induced gonorrhœa in three out of six medical students, by inoculation of the urethra with this organism, which he calls *gonococcus*, artificially cultivated. I think that the criticism of Dr. W. T. Belford, of Chicago, is very pertinent on this point. He says: "For one familiar with the natural history of medical students, the experiments would have been far more convincing if the dauntless three had been kept in solitary confinement for a week before and after the inoculation." Bockhart, however, claims that, having cultivated the organism on gelatine, he inoculated with the fourth culture a paralytic hospital patient, and observed a typical gonorrhœa on the sixth day. The subject is as yet in an unsettled state.

On the theory that gonorrhœa is due to a micro-organism, Cheyne, of London, has recommended a new and peculiar method of treatment. The chief point of it is, the use of thin bougies, made of iodoform, eucalyptus oil, and butter of cocoa. I have tried this method faithfully, in fully ten cases, and have not derived satisfactory results from it.

CHAPTER II.

GLEET.

WHAT is the difference between chronic gonorrhœa and that affection known as "blennorrhœa" or "gleet?"* If half a dozen surgeons be asked this question, it is not probable that the answers of any two of them will exactly correspond, and this because a gleet is, in most cases, preceded by a gonorrhœa, the latter terminating in the former, without any broad line of demarcation between them. Yet if gleet be worthy of a separate name, it must possess some distinctive features, and these we will endeavor to describe.

Let us understand then by a gleet a chronic discharge from the urethra, unattended by pain, or other symptoms of inflammation, and containing only a very small quantity of pus, of a milky or opaline color, so scanty as to be seen only when a very long time has elapsed since passing water, as in the morning on rising, when the lips of the meatus may be found glued together, and, possibly, a small drop of the fluid may be pressed from the canal. At other times the fluid is absent or is only detected by the presence of long shreds, looking like vermicelli, floating in the urine. This fluid deposited upon the linen leaves a diffused grayish patch, slightly darker (possibly faintly yellow) at the centre. Another characteristic of gleet is that, unlike chronic gonorrhœa, it is not readily lighted up into an acute stage of inflammation by excesses in diet or coitus, although it is not entirely free from this risk.[1]

In addition to gleet, we might admit with Diday, still another chronic discharge from the urethra, which is characterized by its entire freedom from pus or muco-pus and which consists merely of a transparent, viscous fluid, that can be stretched to some distance between the fingers. Its appearance is not constant in the morning as is the discharge of gleet, nor does it depend upon the time passed since urinating. It shows itself from time to time, independently of erections, and especially on straining at stool, etc., and the lips of the meatus are more moist than they used to be (or than the patient supposes them to have been). In short, such cases should properly be included under the head of "prostatorrhœa," in which mental treatment is of quite as much importance as physical, not to say more so.

[1] When a patient has exposed himself in coitus and has observed an aggravation of an old discharge, the question often comes up, whether he has simply revived the acute stage in consequence of his imprudence or has contracted a fresh clap. The former is probably the case if the aggravation of the symptoms appeared the next morning after exposure; the latter, if the aggravation has been delayed a few days (Diday).