

tatic inflammation has apparently resulted from a similar mode of administering copious injections of moderate temperature. Again, the danger of throwing the injection into the bladder is *not* a fictitious one. I have seen several cases where the bladder has been easily filled and refilled over and over again with the short pipe of an ordinary Davidson's syringe. Again, I would object to the *brisk* flow of the fluid as introducing an unnecessary element of force, which on general principles should be eliminated, as far as practicable, from all operations and procedures involving the genito-urinary apparatus. A gentle, steady current would, it appears to me, produce equally good results without the danger of forcible distension of the deep urethra. These points, while they seem to me important to recognize, are yet susceptible of easy correction without detracting from the efficiency of the method which in the main appears to me most promising, and which, with water of a temperature of 120° F., I shall not hesitate to give an early and thorough trial.

## LESSON XXXVII.

Usual method of treating gonorrhœa in Great Britain, by Messrs. Hill and Cooper—Cold rather than hot applications are recommended—Specifics not given in the first stages—Injections rarely to be used until the acute inflammation has subsided—Formulæ given much the same as previously quoted from American authorities—Treatment in vogue at King's College Hospital, London—St. Mary's Hospital—University College Hospital—Middlesex Hospital—Expectant treatment.

OF the English authorities, we have, latest, Hill and Cooper.\* In the first place, in commencing the treatment of gonorrhœa, they agree precisely with Van Buren and Keyes, as to the importance of hygienic treatment and the mode of carrying it out. Alkaline and demulcent drinks, with a saline aperient every morning. Warm baths half hour at a time at 95° F. (p. 509 *ibid.*). Advise that penis be wrapped in strips of rag dipped in warm water and covered with oiled silk or ice-water, whichever gives most relief. Otis's coil with cold water current. If pain very severe 15 or 20 leeches to perineum.

No injections have been found by them serviceable during inflammatory stage, except two, viz., half-hourly injections of tepid water into urethra which sometimes give relief, but often none. If congestion be moderate, hourly injections of alum or sulphate of zinc, quarter grain to the ounce. Painful micturition best relieved by alkaline drinks, warm baths, rest and local depletion. Injection of ice-water into urethra before micturating, or immersion of penis during the act, often effectual in easing pain.

Of specifics they say (p. 513): "The good effect of

\* "Syphilis and the Local Contagion Disorders." London. Second edition, 1881, p. 508.

copaiba depends almost entirely on its being given when the mucous membrane is ready for it. If given too early, it fails to do good, and sometimes does harm. The urethra is in the most favorable condition for copaiba when the pain on passing water is nearly gone, when the painful erections are nearly at an end, when the discharge has become less in quantity, etc. . . . Much pain in passing water is always a sign that specifics will do harm." Cubebs, oil of yellow sandal-wood, Gurgun balsam, balsam Peru, and Chian turpentine believed occasionally to have been useful; also, oil of ergeron. Kava kava, suggested; not yet tried.

In regard to injections they say :

"Recourse should be rarely had to them (p. 517), until the acute inflammation has nearly subsided; and they are most effective when given to complete a cure that has already made progress by other means." Formulæ for several, practically the same as recommended by authorities already quoted:

Mr. J. L. Milton, of London, who has written a work of over three hundred pages on the subject of gonorrhœa and its complications, in the fourth edition, in 1876, gives a summary of the views of practice in gonorrhœal disease in Great Britain, and while his own views are generally in accord with those quoted from authorities in this country and in England, previously cited, he very evidently has not their faith in the necessities or in the efficacy of injections or specifics in the treatment of the disease. He presents the plan of management in the different hospitals of London.\* Thus—

*In Guy's Hospital.*—Mr. Bryant gives scruple or half-drachm doses of tartrate of potassa, adding, when weakness is present, potassio-tartrate of iron and tincture of the muriate of iron. He has given up injections, but in some cases introduces a concentrated solution of tannin into the urethra by means of a bougie.

*London Hospital.*—M. Maunder gives a mixture of

\* Condensed from reports published in the London Lancet in 1867.

copaiba, liquor potassæ, spirit of nitric æther and camphor julep. In the acute inflammatory stage a scruple of nitrate of potass, with or without an eighth of a grain of tartar emetic and morphia, every four hours, night and day. An occasional purge is ordered. For gleet he prescribes twenty drops of tincture of muriate of iron thrice daily. In private practice he prefers injections of sulphate of zinc and treatment on general principles.

*St. Bartholomew's Hospital.*—Injections of sulphate of zinc two grains to an ounce. When there is much inflammation this is first of all allayed by means of warm fomentations, warm baths, opium, or a suppository of morphia. Free action of the bowels is maintained. Diluents are prescribed. This treatment is described as almost invariably successful. Should it fail, the local application of bougies and the counter-irritant effects of blisters applied to, or nitrate of silver rubbed over, the front of the upper part of the thigh, Scarpa's triangle, are found the most efficient remedies. Orchitis is treated with opium, rest, and linseed poultices.

*King's College Hospital.*—Mr. Wood, in the acute stage, gives a saline aperient, or a drachm of compound jalap powder, or a drachm of jalap and calomel if the patient be bilious, at intervals of three or four days, or a week, during the treatment. Afterwards he gives liquor potassæ or bicarbonate of potassa in camphor mixture or infusion of pareira, with plenty of diluents. He prescribes early and frequent injections of lead lotion and glycerine. For orchitis he punctures the tunica albuginea. To allay chordee he uses compound henbane pills, or in severe cases morphia or chlorodyne, aided by the local application of iced water.

In the chronic stage, while the discharge is profuse, Mr. Wood gives copaiba and sulphuric acid, with frequent injections of sulphate of zinc, alum, or nitrate of silver; in obstinate cases powdered cubebs in drachm doses. In sluggish cases, with gleet discharge, tonics, mineral acids, and especially tincture of sesquichloride of iron in twenty-minim doses, three times a day. If

the discharge become gleet or thin, injections of a weak solution of chloride of zinc, or perchloride of iron and glycerine. Sometimes he employs the same substances in the form of a soluble bougie or uses matico.

*St. Mary's Hospital.*—The treatment of the late Mr. Gascoyen is described as consisting of weak astringent injections in the very early stage, but not when the symptoms had become severe, preference being then given to copaiba in doses of forty to sixty drops daily. For ardor urinæ, irritability of the neck of the bladder and chordee, if severe, suppositories of soap and opium. After the violence of the symptoms had passed off weak injections might again be employed, along with drachm doses of cubeb when the discharge was very obstinate; after this quinine, tincture of iron, and other tonics. He considered salines and depleting means in the early stages not only useless but injurious, and he scarcely ever knew abortive treatment succeed, while he often saw gonorrhœa exasperated by it.

*Charing Cross Hospital.*—Mr. Barwell avoids copaiba. In a first attack he purges, orders hot bathing, diuretic or aperient alkalies as may be indicated, followed by an injection of sulphate of zinc, two grains to an ounce. For second or subsequent attacks, free use of aperients and injections; chronic cases may be treated with tannic acid injections, three or four grains to an ounce. For slight but continuous discharge, either Chian turpentine or Canada balsam, with black or cayenne pepper. He often finds tincture of steel and tincture of capsicum useful. Cubeb is not better than the other peppers. The most certain and efficacious treatment is to pass down every other day, for an inch or an inch and a half, a bougie smeared with an ointment containing three, five, or even ten grains of nitrate of silver to an ounce of lard.

*University College Hospital.*—Mr. Christopher Heath, in the early stage, injects from the very beginning a strong lead lotion, an ounce of the liquor plumbi to seven of water. In the ordinary acute form he prescribes injections of warm water and weak lead lotion,

followed by sulphate of zinc injections when the acute symptoms have subsided. Rarely gives copaiba. For chordee, extract of belladonna and glycerine applied to the under surface of the penis, with a pill of opium or henbane at night. He finds acute orchitis yield readily to antimony and sulphate of magnesia. When there is much œdema, he punctures the tunica vaginalis. Later on, strapping and mercurial ointment remove any enlargement of the testis. In gleet he examines the urethra with the bougie and endoscope, and if, as frequently happens, he discover a distinctly diseased surface, a strong solution of nitrate of silver is applied topically; if the disease appear to be more general, an astringent injection is given, a large metal bougie passed and steel prescribed.

*Middlesex Hospital.*—In the early stage Mr. Hulke prescribes an injection of acetate of lead frequently repeated, and purges freely, generally giving compound jalap powder. In the more chronic condition he orders frequent injections of one grain of nitrate of silver to eight ounces of water. For old gleet copaiba or cubeb, more frequently, however, tincture of sesquichloride of iron. In acute orchitis, Mr. Hulke prescribes nauseating doses of tartar emetic with Epsom salts, and sums up as follows: "In the pages the reader has just passed through, eight different systems of treatment are found to prevail in as many different hospitals, all adopted and put in force by able and experienced surgeons. What is more, my inquiries lead to the conclusion that, had the number of hospitals reported upon been multiplied tenfold, the result would have been to display ten times as many different methods." He also quotes the views and plans of Mr. Chalmers Miles, who advocates extensive blistering of the thighs as the sole remedy in gonorrhœa, claiming cure by this method in five to six days, citing an experience in sixty cases (p. 60, *ibid.*). On page 62 he refers to treatment without specifics, or injections, or blisters, thus:

"*The Expectant Treatment.*—This system has at one time or other had advocates of such capacity that it cannot be passed over. Not long ago it found an able

champion in Dr. Chambers, of St. Mary's Hospital. This gentleman, as I understand him, says that gonorrhœa is naturally a most mild disease both in the male and the female, *and if left to itself will get well in a short time, occasionally in four or five days*, while the simplest treatment will remove it *in a fortnight* if it be not made severe by the folly of the patient or his medical attendant. "I consider," he says, "all primary heroic treatment of urethral discharges *a most unjustifiable interference with nature.*" Of this plan Mr. Milton says, "It is not very easy to imagine how any one could argue in favor of a more hopeless cause. There is no evidence brought forward in support of a statement which runs quite counter to the experience of the greatest men who have studied the disease. What they, after mature deliberation, say, utterly negatives the idea of gonorrhœa being so easily managed by the simple process of letting it alone."

## LESSON XXXVIII.

Mr. Milton's statistics of the results of the treatment of gonorrhœa by balsam copaiba—Cases treated by rest and abstinence—Treatment by purgatives—Popular appreciation of the value of copaiba—Mr. Milton's views of the treatment of gonorrhœa by injections—He does not accept statements of their great efficiency—List of articles recommended as curative—Over fifty articles selected to represent the varieties of injections in common use—Accuracy as to their comparative value, in Mr. Milton's opinion, not possible—Mr. Milton's experience in the use of injections—Their power as curative agents very limited—His statistics show an average continuance of gonorrhœa, under any treatment, of over four weeks—His opinion of the use of copaiba—He claims that it should be banished from the therapeutics of gonorrhœa.

Mr. Milton gives his own statistics of results of treatment by balsam copaiba, which are so interesting in view of the claims for the great curative properties of copaiba in the treatment of gonorrhœa, generally accepted, that I shall quote them entire, from page 70 *et seq.*:

## CASES TREATED WITH COPAIBA.

	Initials.	Nature of Case.	Treatment.	Result.
1	J. D.	Mild gonorrhœa of three months' duration.	Copaiba. Injections of sulphate of zinc and nitrate of silver.	Not quite cured at end of 27 days.
2	W. J.	Gonorrhœa of three or four days' standing.	Potassio-tartrate of antimony, copaiba, turpentine, and steel.	At the end of 86 days left off attending. Not quite cured.
3	—	Gonorrhœa of three days' standing.	Pulv. salin. At the end of fourteen days copaiba, and then turpentine. Afterwards colchicum.	Cured in 65 days.
4	J. S.	Ordinary gonorrhœa.	Had been treated for seven months with sulphate of magnesia, copaiba, etc.	At the end of this time he was still suffering from gleet, cloudy urine, and pain over the bladder.

CASES TREATED WITH COPAIBA.—*Continued.*

	Initials.	Nature of Case.	Treatment.	Result.
5	L. H.	Gonorrhœa of a month's standing.	Injections and purgatives for fourteen days. Pulv. salin. and inject. of sulph. of zinc. Copaiba, turpentine, and pulv. salin. Injections.	Cured in 52 days.
6	W.	Gonorrhœa of a week's duration.	Magnes. sulph., followed by copaiba and nitrate of potass. Injections of sulph. of zinc.	Not quite cured at the end of three months. Subsequently he reports that the disease died out without anything further being done for it.
7	J. W.	Gonorrhœa of some days' standing.	Aperients and copaiba perseveringly used for seven months.	Rapid improvement. Severe relapse, apparently from bathing. At the end of 7 months scarcely well.
8	Mr. N.	Gonorrhœa, second attack, very severe.	Copaiba, liquor potassæ, compound calomel pill at night.	Cure twice deferred by his giving up treatment just as he appeared to be getting quite well.
9	Mr. R.	Gonorrhœa of four days' standing, complicated with a sore on the penis.	Copaiba and liquor potassæ with five grains of blue pill every night for a short time. Injections of nitrate of silver and sulph. of zinc.	Discharge removed in 3 months.
10	Mr. W.	Gonorrhœa of a fortnight's standing; first case.	Copaiba, cubebs, zinc injections. Almost constant rest.	Little improvement at the end of 12 weeks.
11	Mr. E.	Gonorrhœa of four days' standing; second attack.	Brisk purgatives, copaiba, liquor potassæ, pil. hydrarg. chlor. comp. Injections of arg. nit. and zinc. sulph.	Cured in about 7 weeks.
12	Mr. B.	Gonorrhœa of some weeks' standing.	Copaiba, liquor potassæ, compound calomel pill.	At the end of 2 months still some gleet remaining.

CASES TREATED WITH COPAIBA.—*Continued.*

	Initials.	Nature of Case.	Treatment.	Result.
13	A. T.	Ordinary gonorrhœa.	Took six drachms of copaiba, and the same amount of spirit of nitric ether, every week for one year.	Still some purulent discharge remaining at the end of that time.
14	Mr. H.	Ordinary gonorrhœa. Patient very delicate.	Took two pints of copaiba in two months, under the care of an experienced surgeon.	No better at the end of the time.
15	C. S.	Simple gonorrhœa.	Took half a pint of copaiba a month for four months.	Discharge diminished to a very small amount; returned directly on the copaiba being left off.
16	Mr. F.	Rather severe. Patient himself a surgeon.	Copaiba in small doses, and then an ounce daily for above two months.	Little if any improvement at the end of this time.

He also quotes (page 66), the results of treatment of gonorrhœa by rest and abstinence alone, 15 cases, with cure, varying from three to twenty-three days, and an average of eight and one half days.

Eight cases treated with cubebs alone, with an average cure of five and one half days; ten cases treated with capsicum, with an average cure of thirteen and one half days; three cases treated with camphor, with an average of nine days.

*Treatment by Purgatives* (page 24, *et seq.*, *ibid.*): One in sixteen days, one in twenty-eight days, one in forty-seven days, one on the thirty-fifth day a stricture discovered—cure in two months by bougies.

Eight cases treated by aperients alone: four cured at periods varying from three to forty-five days, one in three days, one in sixteen days, one in thirty-seven days, with slight gleet remaining cure in eight days by tincture.

An interesting fact, showing the popular appreciation of the value of copaiba, is presented on page 70, where

he says: "My own experience has satisfied me that the practice of giving it is very extensively diffused, and Mr. Weeden Cooke confirms this. On inquiry at the London Custom House, he found that during the first ten months of the year 1859 no less than 118,396 pounds of copaiba were admitted, or at the rate of 151,075 pounds annually—a quantity sufficient to supply five hundred thousand people every year with a strong dose three times a day for nearly four weeks!

In regard to treatment of gonorrhœa by injections, Mr. Milton evidently distrusts much that has been claimed for many varieties; on page 107 *et seq.* he says: "A list of the substances recommended for injections within the last few years would perhaps show, more strongly than anything I could say, the discrepancy of opinion that prevails as to which is the best. I therefore give a selection: chloride, tannate, and acetate of zinc, carbolate of zinc, sulphocarbolate of zinc, sulphate of zinc, curing as a rule on the third or fourth day, or even sooner; nitrate of silver; acetate of lead; sulphate and chloride of copper; the four sulphates (a combination of alum, zinc, iron, and copper); iodide and potassio-tartrate of iron, iodide of iron in combination with iron filings, tincture of sesquichloride of iron, solution of perchloride of iron, solution of persulphate of iron; oxychloride of tin combined with phosphate and tannate of tin; trisnitrate of bismuth; pernitrate of mercury, perchloride of mercury; chloride of soda; chlorate of potass, carbolate of potass, carbolic acid and potass, permanganate of potass, which was said to cure recent attacks of the disease in from one to two days, and only failed twice in 64 cases, being just one day less than was requisite to effect a cure with the chlorate of potass; Condyl's fluid; alum, tannate of alumina, succeeding, according to one author, where all the usual injections had failed, and described by another as not more efficacious than other kinds of injections; chloride of lime, bisulphite of lime; tincture of iodine, recommended as having never failed during a ten years' trial; nitric acid combined with strychnia; tannin, glycerine of tannin, singly and combined with olive

oil and mucilage; glycerine, combined with carbolic acid and tannin; glycerine and starch; matico, subsequently stated by Signor Carlo Ambrosoli to be the last medicament of the kind we should have recourse to; starch; tincture of catechu, solution of catechu in syrup of tolu; tincture of rhatany, extract of rhatany; vinum opii, tincture of opium, watery extract of opium, opium and glycerine; decoction of poppies; acetate of morphia; belladonna; chloroform; hydrate of chloral; tincture of aloes; hydrastin; leptandrin; red wine; copaiba, volatile oil of copaiba, repeatedly tried in vain at the recommendation of previous observers; honey; green tea; wine; ice-cold water, lukewarm water, not known to have failed "where the system was adopted at the commencement of the disease and followed throughout," warm water, recommended by Dr. John O'Rielly as curing in from seven to nine days; earth and water, often curing in two or three days, and retention of the urine by means of a kind of forceps (*pince*). Though the last can scarcely be considered as an injection it is intended to act in the same way."

"I do not know," says Mr. Milton, "what the reader thinks of this, but to me it is unsatisfactory in the highest degree. In the first place, it would demand a series of careful experiments, prolonged for at least fifty years, to examine with anything like accuracy the comparative value of the different substances here recommended. I say this quite deliberately, for it took me more than two years, at a time when I was not overburdened with private practice, to satisfy myself even imperfectly as to the relative power of three drugs only, namely, the sulphate of zinc, acetate of zinc, and the nitrate of silver."

Of his own experience, he says, page 119 *ibid.*: "I have for years employed injections so soon as ever I could obtain the patient's consent to let me use them, and have never in a single instance had to regret doing so." And he says of injections of nitrate of silver: "Of all the substances ever employed for injections this is, to my thinking, the best. I have seen a great number of injections tried, and have one time or other tried a

good many myself, but I have never observed any exercise such a marked control over gonorrhœa as a solution of nitrate of silver, properly given, and of the proper strength. Yet it is used by comparatively few practitioners, and it is no uncommon thing to hear surgeons say that they have given it up, in consequence of failing so often with it, or from its bringing on stricture. The latter objection is, I think, already got over. The former merits decided attention," but on the following page (p. 120) he says that, "its power as a curative agent, when employed without the aid of other means, is in the general run of cases very limited."

Mr. Milton's opinion of the value of injections as a curative agent in the treatment of gonorrhœa, would seem, then, to depend chiefly upon the use of other means used at the same time. It is evident, from his statement to this effect in the preceding paragraph, that he does not consider them a necessity.

The statistics which Mr. Milton presents on page 70 would seem to show that a copaiba diet, in the average case, could not be estimated at less than about four weeks. On page 68 he gives his opinion that, "perhaps, without exception, the most potent and generally used of all the internal remedies for gonorrhœa, is copaiba, *one of the most nauseous drugs ever found out,*" and, further, he says, "it is quite time that men banished it from the therapeutics of this complaint;" and again, at page 70 *ibid.*, he remarks that, as "no amount of experience will enable the surgeon to diagnose *at the outset* those cases in which copaiba will be useful from those in which it will almost certainly fail, it necessarily follows that every surgeon who treats all cases with copaiba—and there are plenty who do so—must give it in many instances where it is sure to be of no service." In regard to the dose and mode of giving copaiba, Mr. Milton says, page 73: "Some surgeons give four and twenty times as strong a dose as others." As to the best time, he quotes Dr. Bumstead,\* as saying that, "Copaiba can be administered with safety and *to much greater ad-*

\* Bumstead and Taylor, 4th Ed., page 65.

*vantage* in the acute stage of gonorrhœa, or at an early period in the stage of decline, than afterwards, and the same is true of cubeb." Mr. Milton says: "My own experience quite confirms this. . . . As to waiting until the inflammation is subdued, it is, to the best of my judgment, simply useless," whereas, Hill and Cooper, page 513, say, "The good effect of copaiba depends almost entirely on its being given when the mucous membrane is ready for it. If given too early it fails to do good, and sometimes does harm." Milton quotes a reviewer in one of the recent medical journals as saying, that, "no sensible or experienced surgeon would think of giving copaiba in the acute stage of gonorrhœa."