

dence of the complete disappearance and virtual cure of syphilis. Finally, it may be stated in regard to the inflammatory complication, present in the foregoing case, that this is likely to occur in any initial lesion of syphilis from the persistent application of irritants, such as nitrate of silver, sulph. copper, etc., or from friction by the clothing. Its occurrence is favored by the scrofulous diathesis, by sexual excitement, and by irregular living and alcoholic stimuli.

LESSON XII.

Clinical case—Phagedenic form of the Initial Lesion and its physical peculiarities—Treatment by mercurials—Rapid healing under their influence—Phagedena of Chancroid influenced unfavorably by mercurials—Subsequent history, showing results of insufficient treatment in early stage—Early, steady and prolonged treatment the only trustworthy means of preventing later lesions of the disease—Inability to bear the mercurial treatment very rare—Cures, in properly treated cases, estimated at 95 per cent.

Case V. *Gangrenous initial lesion, or so-called phagedenic chancre, followed by mucous patches; death by cerebral softening.*—L. K., drug clerk, aged 21; of scrofulous diathesis and dissipated habit; presented with an inflamed ulcer about as large as a three-cent piece, shaped somewhat like the figure 8, partly on the glans penis (left side), and encroaching upon the fossæ glandis, and situated upon a densely indurated base. The floor of the ulcer, which was apparently about a line in depth, was of a yellowish gray color, of a shreddy appearance, exhaling the peculiar sickening odor of gangrenous tissue. Glands of either groin enlarged and hard; no other signs of disease. He gave a history of great sexual and alcoholic excess prolonged over several weeks; the discovery of a sore on his glans penis about a fortnight previous, and daily touchings with blue stone, on his own responsibility. He fancied he was getting better when he went off on a spree of several days' duration, having occasional sexual connections in the time. For the last two days there had been considerable pain, and he had been applying iodoform in powder. The induration, which was very dense, extended about two or three lines from the edge of the ulcer, where it met quite abruptly the swollen tissue surrounding it. Diagnosis: gangrenous initial lesion of syphilis. The fact that simple sores and also chancroids become indurated by applications of caustics, and even of simple astringents in some cases, was borne in mind; but the

recent well-marked and painless gland enlargements in the inguinal regions were, when taken in connection with the history and condition of the lesion, considered sufficient proof of its syphilitic origin to warrant the test by a mercurial course. The patient was sent to bed, powdered charcoal poultice, sprinkled with iodoform as disinfectant and sedative, and calomel in $\frac{1}{12}$ -gr. doses was administered every hour during the day, not continuing it through the night; and when $1\frac{1}{2}$ grains had been taken the patient's gums were distinctly tender and the medicine was omitted. The slough extended until the entire induration was destroyed, it was removed, within a few days, and showed a healthy granulating surface. The mercurial was continued in the form of the proto-iodid, hyd. in pills of half a grain each, and healing took place in about a month, leaving scarcely a trace of induration, but a soft, juicy-looking swelling, about the size of the original lesion, in its place. Some swelling and tenderness of the submaxillary glands occurring, the mercurial was entirely omitted, and the patient put upon cod-liver oil and iron. Not seen again for nearly six months, when he reported with mucous patches on the soft palate and gland enlargements in cervical region well marked. Again put on the mercurial treatment, and this time by nightly rubbing in $\frac{1}{2}$ dram of ung. hydrarg. mixt. under the arms and knees alternately. The mucous patches were touched with the solid arg. nit. After about a fortnight the patches being quite healed, the gums scarcely, if at all, affected, the right submaxillary gland began to inflame, and in spite of local applications, of immediate cessation of the mercurial, and the administration of iodine and cod-liver oil, it went steadily on to suppuration. The patient here passed from observation. Some three years after he was reported as having several epileptic seizures, finally dying of cerebral ramolissement.

Remarks.—The early prominent feature in this case is the gangrene occurring in the initial lesion. Auspitz.*

* Anatomie d. Syph.: Initial Sklerose. Von Prof. H. Auspitz u. Dr. Paul Unna. Vierteljahrschrift f. Derm. u. Syph, (1876), s. 161.

Unna,* Beisiadecki,† Verson, Kaposi, and others have shown that the induration of the initial lesion is dependent upon a dense infiltration of cells and development of fibrous tissue which interferes more or less with the vessels of nutrition. Complete obstruction occurring in certain cases, gangrene results as in the foregoing case, and is essentially different from the molecular gangrene of chancroid, which is the result of the destructive nature of the lesion *per se*. Hence the treatment by mercurials, which tends to produce fatty metamorphosis of the obstructive material in the initial lesion of syphilis, and thus relieve the cause of necrosis, is indicated; while in gangrene or phagedenia occurring in the chancroid the mercurial influence would tend to hasten the destructive action.

The fact that the slough was confined to the indurated mass, and that healing went rapidly on under the mercurial treatment, is in confirmation of the foregoing view.

The inability to bear a mercurial treatment may reasonably be attributed to the scrofulous diathesis, and this aggravated by every sort of dissipation and imprudence. The father of this patient died of chronic phthisis, and this patient had had swellings of cervical glands *without suppuration* some years previous. The occurrence of epilepsy, and subsequent death from brain disease, (which was designated cerebral softening,) in a young man of twenty-four years, can safely be considered a legitimate sequel of syphilis. It is reasonable to believe that, had the patient been able to bear a prolonged and systematic course of treatment by mercurials, he would have, in all probability, escaped the trouble which caused the fatal issue.

In the recent work of Hill and Cooper, of London (1881), prominent English authorities, the following statement occurs: "There is also good foundation for

* Zur Anatomie der Syphil.: Initial Sklerose. Vierteljahrschrift f. Derm. u. Syph. (1878), s. 531.

† Archives of Acad. Sciences, 1867. (Otis's Physiology, Pathology, and Treatment of Syphilis. New York: Putnam. 1881.) Vienna, 1873. Vol. i., p. 53.

the belief that steady, prolonged mercurial treatment, although not an infallible means, is the only trustworthy one for preventing a return of the disease."

Bumstead and Taylor, in their late work* (New York, 1879), go so far as to say that "we know that the great majority of cases (estimated as high as 95 per cent) which have been thoroughly treated are absolutely cured, and are never followed by a relapse." It is not, then, easy to estimate the gravity of the misfortune to one who, having acquired syphilis, is unable to bear a systematic mercurial treatment. With judicious management such cases are fortunately rare.

* Fourth Ed., 1879, p. 810.

LESSON XIII.

Clinical case—Initial Lesion complicated with Herpes and Phimosis—Difficulties in diagnosis—Treatment—Contagious character of secretions from all fractures of skin or mucous membrane during active stage of Syphilis—Falling of hair due to cell accumulations about hair bulbs—Polymorphous character of Syphilis in some cases—Absence of characteristic lesions in others.

CASE VI.—*Initial lesion, occurring upon herpes and complicated with phimosis. Followed by roseola, mucous patches, and alopecia.*—H. T., merchant, 34, had suffered on frequent occasions during several years with herpes preputialis, the little watery vesicles of which would appear sometimes independently of any venereal exposure, and again would follow such exposure within three or four days. In several instances the vesicles became pustules, and small ulcers were formed; but through the use of the simple lead lotion recovery had always taken place within a few days, except in a single instance, when it was fully a fortnight in healing, and there was said to have been much swelling and hardness. His prepuce was redundant and habitually covered the glans penis, but was readily retracted and was kept scrupulously clean, as he had long previously found that inattention to this favored the production of the herpes. Occasional venereal connections were indulged in, with great care taken to secure immunity from disease. The only person with whom connections had been had, for three months previous, was with one who was thought entirely above suspicion of having any venereal trouble. A fortnight previous, three or four days after last connection, a group of herpetic vesicles appeared. These were on the inner layer of the prepuce, at its attachment near the frenum, on the left side. They were treated as usual with the lead water and disappeared within a few days, with the

exception of two points which pustulated, and finally, when about the size of a small split peppercorn, coalesced. Had much necessary walking to do, and the parts after about ten days became so swollen that the prepuce was retracted only with pain and difficulty. Still certain that the trouble was a simple herpes, aggravated by his exercise and by a rather debilitated general condition from overwork, he sought advice only as to herpes. This was about four weeks subsequent to his last connection.

Condition on presentation, June 10, 1878, as follows: In good general health, but somewhat debilitated from overwork. Penis somewhat turgid and reddened; prepuce redundant, covering glans. Orifice contracted so that the glans could not be exposed. Pressure between the fingers, just at the base of the glans on the left side, showed some slight condensation of the tissues and caused some pain, and oozing of slight mucopurulent fluid. Two inguinal glands about size of a marrowfat pea in left groin. No amount of argument would persuade the patient that his difficulty was likely to prove different from the attacks of herpes with which he was familiar, and he declined, almost indignantly the suggestion that an examination of his paramour should be made in order to aid in determining the exact nature of his difficulty. Absolute rest on the lounge or in bed and injections of weak lead and opium wash to thoroughly lave the preputial cavity was continued for the next two weeks. The attempts to retract the prepuce gave so much pain that it was no longer attempted. Under the rest and sedative treatment the soreness diminished, but an induration, which was appreciated in some degree on first examination, was now increased, and the two glands in the left groin, one above and the other below Poupart's ligament (and which had been strenuously insisted on as the result of strain occurring a long time previous), were evidently increasing in size and were slightly tender on pressure; besides this several smaller glands were now appreciated on the opposite side. With these strong evidences of syphilitic trouble, the patient was finally persuaded to sub-

mit to a mercurial treatment, commencing with pil. proto-iodid. hyd. $\frac{1}{4}$ grain, three times daily, and 15 drops Wyeth's dialyzed iron in a glass of milk, while the same local applications were continued. On the third day pills every six hours. At the end of a week the tenderness of the local lesion was scarcely perceptible, and the swelling less prominent. Glands no longer sensitive on pressure. No effect of the mercurial seen in the mouth, but a slight intestinal irritation causing two or three fluid passages from the bowels, $\frac{1}{2}$ grain of the watery extract of opium was added, and a dram of ung. hyd. mit. ordered to be rubbed alternately into each thigh every night. No further intestinal trouble. The preputial swelling and tenderness decreased so much within the next fortnight that the prepuce was retracted (though with some difficulty), discovering on its inner surface a superficial erosion about as large as a five-cent piece, set in a distinct and characteristic disc of indurated tissue. Slight tenderness of gums appearing, the ointment was suspended, and pills ($\frac{1}{4}$ gr. protoiodid.) reduced to four, omitting the opium, which had caused slight constipation.

July 5th (seven weeks after last connection), the ulcer had quite healed, but the induration remained prominent. The patient called attention to a bright rosy eruption which was distributed profusely over the body, a few spots on the face and palms. Glands in the cervical region distinctly enlarged; size varying from a buckshot to a No. 4; one especially prominent on either side of the *ligamentum nuchae*. Left epitrochlean size of small pea; right, not discoverable. Mercurial well borne; no tenderness of gums, but a slight red line was seen at the border of the gums of several teeth. Has had some soreness of throat. Examination shows right tonsil inflamed and somewhat swollen; fauces deeply congested; patient advised to leave off smoking. Ordered sat. sol. potass. chlorat. to be used as a gargle and habitual wash for the mouth, teaspoonful to a tumbler of water, three or four times a day.

July 30. Has continued the medicine steadily. Roseola faded out in about two weeks leaving scarcely a trace;

soreness of throat also passed off leaving the parts still congested, but free from tenderness; smokes occasionally; does not think it affects his throat; gums not affected.

August 10. Calls, complaining of return of throat trouble; otherwise doing well. Examination shows a small patch of superficial ulceration on the right side of the soft palate, bordered with a narrow gray line; also a small crack in the mucous membrane at the left angle of the mouth. Explain the importance of such lesions: viz., that mucous patches or any cracks in mucous membrane, of whatever character, during the first year of syphilis at least, give rise to a contagious secretion, and when brought in contact with an abrasion in a healthy person, on the lips or elsewhere, will communicate syphilis.

Touch the ulcerations with solid nit. arg. very lightly, just to whiten, and recommend that this be repeated daily until their complete healing. Also as gums are not at all red or tender, increase pills again to four daily and prohibit smoking entirely, as the effect of tobacco always is to aggravate and prolong syphilitic difficulties of the mouth and throat. Patient complains of his hair falling out; wishes to know if this is due also to his disease. State that it certainly is, but that under faithful pursuance of his treatment this as well as the other difficulties will in all probability be but temporary. A stimulating wash was given for the hair.

The subsequent history of this patient presented no salient features. His acute throat trouble passed off in a few days, but the faucial mucous membrane continued congested for many months. The alopecia, which in some cases extends to entire loss of hair, eyebrows, etc., in this instance was never sufficient to attract attention. The induration on the site of the initial lesion gradually became smaller, but was not entirely gone for quite a year from the date of its appearance, although the treatment was kept steadily up, scarcely missing a dose, giving as much as the patient would bear without producing tenderness or redness of the gums, or irritation of the bowels; this was

from three to six pills of the proto-iodide during each twenty-four hours for a little more than a year. At this time all evidences of cell accumulation at the site of the initial lesion had entirely disappeared. The glands in the groins were still slightly enlarged, but those in the cervical and left epitrochlean regions had quite gone. Was very anxious for consent to marry, but advised to a twelve months' course of what is familiarly known as the mixed treatment—Mist. biniodid. hydrarg. containing $\frac{1}{16}$ biniodid. and 8 grs. potass. iodid. thrice daily. This was taken faithfully, and borne without trouble of any sort. Six months after this, he not having seen any evidences of his former trouble for over a year, and as the inguinal glands, although slightly enlarged, were not greater than many who have never had syphilis, consent was given to his marriage—about two years and a half from date of acquirement of the disease. A short time since he called, having been happily married for over two years, to state that he had had not the slightest return of his old trouble, nor had his wife contracted any disease; his only trouble was that, as yet, he had had no children.

Remarks.—The occurrence of an initial lesion on the site of a *herpes preputialis*, as shown in the foregoing case, is not infrequent. On the contrary, there is no more favoring condition for the acquirement of syphilis than a predisposition to herpes. A slightly irritant leucorrhœal discharge is often sufficient to determine an attack, and the bland and unirritating nature of the disease germ of syphilis does not interfere with the natural course of the herpes. It should never be lost sight of that no lesion occurring after an illicit venereal contact can be safely pronounced free from danger of having been the point of entrance of a syphilitic disease germ until after the longest period which has been known to elapse between *inoculation* and the appearance of the *initial lesion*, and this is never less than forty days.

Second point of especial moment is the prompt effect of the mercurial treatment in reducing the tenderness and swelling, not alone of the initial lesion but of the

adjacent glands, adding proof to the position that mercury acts on the newly proliferated syphilitic cell material which distends and disturbs the tissues, inducing a fatty metamorphosis, (through which alone living material can be eliminated from the organism,) and aids also in deciding between opposing authorities, some of whom * claim that mercury should be withheld as a rule until the manifestation of constitutional syphilis appears; while others † claim that the treatment by mercury should be commenced as soon as the initial lesion can be recognized as such. Certainly, if mercury acts in curing syphilis through any property it is known to possess, it is by its power to hasten tissue metamorphosis or fatty degeneration; and if it has this value in the cell accumulations of the so-called secondary manifestations, it cannot be denied in the accumulations constituting the initial lesion, which has been shown by such authorities as Cohn, Beisiadecki, and others, to be virtually identical in composition and nature with them. Hence we are prepared to agree intelligently with those who begin the treatment of syphilis at the earliest moment of its recognition.

The usual tolerance of mercurials, given in doses, and with the frequency sufficient to produce a mild and curative effect, is well shown in the foregoing case.

It will be observed that the papular eruption, which often occurs about the third or fourth month of syphilis, was apparently absent. Its equivalent was, however, recognized, in the *mucous patches* in the mouth, and in the *alopecia*, which is found by microscopic examination to result from accumulation of cells about the hair bulbs, similar to those forming the papule on the skin in other cases. The polymorphous character of syphilis in the acute stage is well seen in this case, but it will be found that no two cases are alike in the number, locality, or degree of development of their manifestations, and that cases may even be met which pass through the different stages of the disease without pre-

* Bumstead and Taylor ("Venereal Diseases." Philadelphia: 1879).

† Hill and Cooper (London: 1881).

senting a single characteristic lesion of the skin or mucous membrane; the only evidence of syphilis being confined to gland enlargements (often escaping observation), and the subsequent occurrence of well marked sequelæ of syphilis.