

All these had come on so insidiously, so entirely without pain or even itching, that they had only been discovered by the patient to be more than accidental pimples a week or so previously, but had evidently been present a month or more. The treatment was changed from the pil. proto-iodid. hyd. to the mist. biniodid. hydrarg.;* a teaspoonful thrice daily. Scabs poulticed off, and an ointment composed of nitrate of mercury ung. and vaseline, equal parts, applied morning and night. Improvement followed, especially in the open lesions; but after a couple of months, when the first crop had almost disappeared, others appeared on the right calf. Treatment changed to nightly mercurial fumigations (20 grs. calomel), and increase in the iodide of potassium—increasing from eight grains three times a day, a drop for each dose, up to sixty, and taken in a tumbler of milk. After several months, taking from fifteen to twenty fumigations a month, and keeping the iodide at about sixty grains thrice daily, the eruption entirely disappeared, leaving slight, pale, depressed, and corrugated cicatrices on the body, and deep coppery stains on the extremities. The treatment was then omitted, the patient still being in good general health. Capsules of cod-liver oil and iron (Mathey Caylus), administered. After a month or so, other crops, chiefly pustular, came to the surface, apparently *on the site of the former eruptions*, and *came and went* for the next six months, getting better in one place and then cropping out in groups of half a dozen or so in another, and this under a systematic treatment as before mentioned, carried out with as much regularity and persistence as was possible under the circumstances. Relaxing it, for even a few days, was followed by more or less return of the trouble, and it was fully two years after the appearance of the first tubercular eruption before the trouble entirely ceased to recur. During this time no points were attacked except those first mentioned—under the scapula, and on the thigh and buttocks, and soon after on the right calf; after this the *recurrences were in the same*

* See formula, p. 92.

points or in their immediate vicinity. During the entire period covered by the treatment the patient was most of his time at sea, under favorable hygienic conditions, and living a temperate and regular life. Within the last year (1882) the above-mentioned person was seen in consultation for what was supposed to be a malarial neuralgia. There was no history of any recurrence of trouble which could be reasonably attributed to the syphilitic influence for the previous five years. The neuralgia, which was chiefly in the muscles of the spine, after resisting treatment by the iodide for several weeks, finally passed away under the influence of a month's sojourn in the tropics.

Remarks.—The chief interest involved in the appearance of an eruption, after the eighth or tenth month of syphilis, is as to whether it is to be accounted as a sequel of the active disease, or is an evidence of the active presence of syphilitic cell material in the organism. After the first general papular eruption, which, as a rule, appears between the third and the seventh month, and is more or less symmetrical in its distribution, groups of papules may develop on the shoulder or arm or back or forehead, which, although usually darker and more likely to assume an annular or crescentic form, may present all the physical characteristics of the papules of the earlier general eruption. These are known as the *recurring papular syphilides*, and are supposed to be the result of a release of accidentally imprisoned infective cell material from lymphatic glands, in the immediate vicinity of the eruption, and to indicate a continued activity of the contagious element.*

It is quite impossible, in the present state of our knowledge of this matter, to make a positive diagnosis in cases of doubt, until sufficient time has passed to observe the

* "The secretions of syphilitic lesions are found to consist of a serous fluid containing numerous shining granules or molecules, which are masses of protoplasm or germinal matter holding the contagious properties of syphilis. These microscopic bodies are probably taken into the circulation by the *lymphatics* and conveyed over the body." (Bumstead and Taylor on the Venereal Diseases, fourth edition. Henry C. Lea, Phila., 1879. P. 443.)

manner in which the tissues occupied by the eruption, are affected by the presence and the final absorption of the material causing it. Thus the papule, having its origin in an accumulation (proliferation *in loco?*) of germinal cells (commencing, according to Kohn and others, always in a papilla cutis), has several characteristic points. 1st. In certain cases the cells thus crowded together "are not destined to become permanently organized, as they degenerate and disappear, or assume a dull granular appearance, undergo fatty degeneration and are absorbed. Or they may become heaped together in the form of detritus and form pus."*

Thus they either "undergo fatty degeneration and become absorbed," *leaving no loss of tissue to mark their site*, or they become pustules. The tubercle, on the other hand, is made up of the so-called "gummy" or germinal material, identical with that found in the lymph channels; arrested by localized obstruction of such channels; this localized accumulation causing absorption of the tissue in which it is located, finally itself undergoing fatty degeneration and absorption, a depression or cicatrix is left which is a sure diagnostic mark of the uncomplicated syphilitic tubercle.† These so-called "gummy exudations," characterizing as they do all the sequelæ of syphilis (the secretions of which are non-contagious), form the distinguishing feature between syphilis, as a contagious disease, and its sequelæ. Their occurrence, in whatever locality or form, calls for change or modification in the treatment. Iodine and the iodide of potassium having been found to possess a peculiar power in causing the fatty degeneration and elimination of the so-called gummy material is then found promptly efficacious in aiding in the cure.‡

* Caractères cliniques et histologiques des Syphilis, par Moritz Kohn, *Wiener Wochenschrift*. Caractères, 1870. No. 55, *Archives Générales de Médecine*, March, 1872.

† See Van Buren and Keyes, *Genito-Urinary Diseases, with Syphilis*, page 583. Appleton & Co., New York, 1874.

‡ As these processes are quite distinct in their origin they may be present at one and the same time, and thus it may occur that although the tubercular eruption—a sequel of syphilis—is present, the *contagious material* represented by the papule may still exist in the organism; the

The punctate form of the tubercular syphilide, as first described, is usually the earliest of the syphilitic sequelæ, and rarely appears after the third year. The superficial ulceration, with a tendency to the crescentic, or horseshoe arrangement, is next in order, and, is occasionally associated with it, as in the foregoing case, but may occur as late as the tenth and even the twentieth year after infection, and is likely to be especially severe and extensive in cases of chronic alcoholism.

Tubercles occasionally appear singly, or in small groups, on the face, especially on the *alæ nasi*, and, ulcerating superficially, become scabbed over and pursue a very sluggish course, often for many months, and are not unfrequently mistaken for simple lupus. Under favorable hygienic conditions, all these forms yield promptly to treatment: locally, by iodoform, or the ung. hydrarg. nitratis and vaseline; and internally by combination of mercury and the iodide of potassium, as in the *misturæ biniodid.*, and additional iodide of potassium in doses increasing by one drop at each dose up to 60, thrice daily, if well borne, always taken well diluted—in half a tumbler, and finally a tumbler of fluid, preferably of milk. In this way the stomach is rarely rebellious to the maximum dose.

It is a fact well understood by all who have experience in the tubercular forms of syphilis, that local measures, while apparently hastening the cure, are almost wholly useless, except in combination with mercury and the iodide of potassium. It is also equally appreciated that while prompt benefit, is almost certain to follow the use of the iodide of potassium, recurrences of the trouble are much more frequent, than when this

limit of contagion in acute syphilis having been ascertained in the very greatest majority of cases not to exceed three years. Bearing this in mind, it may then be said that although the presenting lesion being tubercular and by its origin illustrating the non-contagious stage of syphilis, yet it cannot be claimed as free from virulence (*i.e.*, power of contagion) until two or more years have passed and all gland enlargements dependent upon syphilis have disappeared; but that after such proof of the termination of the acute stage of the disease, the presence of such tubercular eruption would not indicate a power to transmit syphilis by direct contact or through heredity.

remedy is used in combination with a mild mercurial treatment, either internally or by innunction or fumigation. Such behavior, which is recognized as a clinical fact, is most significant of the conditions which demand treatment. The accumulations of the arrested germinal material, or so-called gumma, as the immediate recognized cause of the local lesions, are readily acted upon by the iodide of potassium, (the weaker agent in producing tissue metamorphosis), while the permanence of results is better secured by the mercurial, which has the greater power to cause a modification, if not a complete metamorphosis of the material causing the obstruction. In the absence of absolute proof, as to the degree and quality of the obstruction in the lymph channels, it may be possible, that this is due, in some cases, to actual closure by cicatricial deposit, such as is seen constricting the parenchymatous structure of the liver, the testicle, etc. If this is the fact, removal of such obstructive material by any sort of treatment is scarcely probable. This would account for the repeated recurrences of trouble, temporarily relieved by treatment, and constituting a form of what is termed a syphilitic dyscrasia. It may also be possible, that, where such cicatricial obliteration of lymph channels is not extensive, the circulation is temporarily relieved by elimination of the excess through treatment, or through fatty metamorphosis, *sua sponte*, until the dilatation of adjoining or subsidiary efferent channels shall afford permanent relief. It is a clinical fact that, as in the foregoing case, relapses continue to occur for years even, and the case is at last permanently cured by efficient treatment: while in others, the troubles, with or without treatment, remain until the termination of the life of the patient, notwithstanding the most judicious care.*

* However much the explanation of gummous collections may need absolute microscopical demonstration, it is conceded by all modern pathologists: 1st. That the so-called gummous material constitutes in some way the sum and substance of all the tertiary and quaternary lesions: in other words, *the sequela of syphilis*. 2d. That this material does not differ microscopically in any appreciable way from the normal germinal elements, such as are found in all the lymphatic gland, channels, and spaces in the human organism. If, then, this material present to a certain degree in all

CASE III. W. McN.; merchant; 42. Temperate, ordinarily healthy; had a well-marked open initial lesion of syphilis at 25 years of age. This was followed by a general papular eruption, at about the fifth month. Treatment desultory, until the appearance of the eruption, when he came under my observation, and was put upon pil. duplex (mass. hydrarg. et ferri). This treatment was well borne, and continued for a year and a half very steadily; occasional intermissions of a few days only, when slight evidences of mercurialism occurred. With the exception of several mucous patches in the mouth, and slight ulceration of the tonsils, during the sixth month, there were no open lesions of any sort. General and local gland enlargements had declined satisfactorily. The patient at this point was put upon the mist. biniodid. hyd. (potas. iodid. 8 grs., hydrarg. biniodid. $\frac{1}{16}$), a teaspoonful thrice daily, and it was faithfully continued for the following six months. During this time the patient was apparently in perfect health. At its close, the only evidence of syphilitic trouble, was the abnormal, but not greatly enlarged, lymphatic glands, at all characteristic points. As these glands had not diminished, appreciably, during the last six months of treatment, it was concluded, in the absence of knowledge of their condition before the accession of syphilis, that they had no longer any pathological significance, and all treatment was suspended. During the following two years, no evidence of syphilis having been manifest, permission to marry was accorded. Child born a year after; mother and

the tissues—for all tissues are supplied with lymphatic spaces or channels—becomes localized in excess at certain given points, this can logically only occur by the obstruction of such channels or spaces. Whether we can yet demonstrate this microscopically or not. It is within the last ten years that even the existence of lymphatic vessels in the most important parts of the body—as, in the eye, in the bones, etc.—has been denied by leading and accepted authorities. But since then it has been proven by Thin, Ludwig, Schweigger-Seidel, and others, that there is not alone a generous supply of lymphatic vessels to the eye and the bones, etc., but even cartilages are abundantly furnished with them. Accepting thus a legitimate deduction from known facts, which furnish logical reasons for the plan and measure of treatment, we may wait hopefully for the microscopical advances which shall scientifically establish our knowledge of the exact mechanism of the late lesions of syphilis.

child healthy—and so continued. Two years subsequent to the birth of the child, and thus six years from the acquirement of syphilis, patient presented with a swelling over the lower portion of the sternum, about the size of half a lemon; quite firm; slightly tender on pressure. First noticed, about half its present size, about a month previous. Diagnosis: *gummy tumor*—a sequel of former syphilis. Treatment: iodide of potassium 8 grs., biniodid. of mercury one sixteenth, three times a day. As the patient was otherwise in good health, nothing further was prescribed. Without any local application, under the above-mentioned treatment, the tumor declined rapidly, and at the end of three months every evidence of it had completely disappeared, and all treatment was discontinued. A little more than ten years have passed, and no further trouble of syphilitic nature has occurred, either to the patient, his wife, or his children, of which latter he has several.

Remarks on Case III.—Claims for the non-contagious character of syphilitic sequelæ, find corroboration in this case. Prompt effects of the specific treatment remove any possible doubt as to syphilitic origin of the trouble. The cessation of treatment on the entire disappearance of the tumor, is in accordance with the usual practice in such cases, but it must not be forgotten that such tumors are likely to return, or that similar accumulations may occur at other points. And while, as in this case, a prolonged immunity may be acquired, even escape from any further syphilitic sequelæ, yet such an accident, indicating failure of treatment during the active stages of syphilis to completely efface the damage then done, must make the patient and his physician anxious and watchful for possible similar developments in other localities. Especially should this be borne in mind when obscure troubles of nutrition or of the motor or sensory apparatus are recognized.

GUMMA OF THE TESTICLE.

CASE IV. J. V., 65; lawyer, in good general health. Presented with an enlargement of the left testicle.

It had a few weeks previously attracted his attention by its weight, and not from any pain in it. The size of the organ, which was ovoid in shape, was four inches in its vertical and three in its horizontal diameter, quite firm and insensitive to the touch. A small amount of fluid was recognized in the tunica vaginalis. There was no history of any urethral disease or any mechanical injury either to the testicle or the surrounding parts; but there was a tolerably clear history of syphilis at the age of 24, viz.: a sore coming on the penis fully three weeks after a suspicious connection, which remained for some time, finally healing under the internal administration of mercury. He married a few years after; had several children; also grandchildren; not one of whom had ever any recognized signs of syphilis. No recognized sign of syphilis had appeared in the patient from the date of the healing of his sore, to the occurrence of the swelling of his testicle, forty years after. The tumor, both as to its accession and its physical characteristics, was like a sequel of syphilis. Freedom from pain, and from irregularities in shape; freely movable under the scrotum: unconnected with any tubercular or cancerous antecedents. About four drams of serum were drawn from the tunica vaginalis and the smooth surface of the tumor, and complete freedom from fluctuation was made more manifest. Treatment by the mist. biniodid. internally, was commenced, together with ungu. hydrarg. mit. externally. Subsidence of the tumor commenced within a fortnight, and at the end of six months the testicle had resumed, nearly or quite, its original size.

Remarks.—The absence of all recognized manifestations of syphilis, as in the foregoing case, is not without precedent. Early constitutional syphilis varies in its intensity as much as any other known disease. The roseola, even if present, may readily escape observation. The papular eruption may be confined to half-a-dozen points, or even a single spot on the body, or a single mucous patch or tubercle, which shall pass away without treatment or recognition, and yet syphilitic sequelæ may