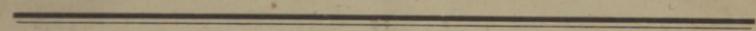


Box 2

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ARE THERE ONE OR TWO

SYPHILITIC POISONS?

✓ —BY—

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ARE THERE ONE OR TWO

SYPHILITIC POISONS?

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A Paper read before the Zanesville Academy of Medicine, by

H. CULBERTSON, M. D., Zanesville, O.

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*Mr. President & Gentlemen:* In this discussion it is my duty to consider the point "are there one or two syphilitic poisons."

When this disease first made its appearance, it was thought to be derived from the stars. Again it was thought to be due to the leprosy, or to filth, to poverty, to debauchery, and to a variety of causes; — or in other words, it was not regarded as a specific disease at that time.

It was reserved for John Hunter to establish the fact of its specific nature, and its propagation, mainly, by sexual intercourse.

Later M. Leon Bassereau, a pupil of the great "unitist" and syphilographer, M. Ricord, claimed that the "hard sore" always produced its like, and his friends, or others showed, that the "soft sore" always gave rise to the "soft sore." He advocated the doctrine of two syphilitic poisons, one general, affecting the entire organism, the other local and not involving the constitution. It was not long until the learned master became a convert to the new doctrine.

But opposition sprang up, and Le Clerc maintained that there was but one syphilitic poison, and inventing the name "chancreoid," he held that in it, the virus of syphilis was modified, in passing through the general system of parties who had suffered constitutional syphilis, so as to change it and certain features of the disease. He

regarded the soft, as the offspring of the hard sore, and the former related to the latter, as is variola to varioloid.

But still some of the phenomena of syphilis could not be accounted for by the doctrines proposed, and M. Rollet advanced the theory of the "mixed chancre" as a solution for some of the defects of "syphilitic duality."

Lastly, we have the ingenious view of Mr. J. Hutchinson, of London,—see *Lancet*, Sept. 18th, 1875,—that the "soft sore" is produced from pus-contagion, and which pus has been modified by the syphilitic virus. As we understand him, the true syphilitic virus is changed by a local inflammation, induced by the presence of that poison, and a pus is the product, which develops the "soft sore." He seems also to claim, that if there is present in such a soft sore any of the "syphilitic matter" unchanged by the influence of the processes going on in the "chancreoid" during the development of this pus, that constitutional syphilis may ensue; but if this true virus, unchanged by the soft sore, is absent from the fluids of the "chancreoid," general manifestations will not follow, and the local sore can only be produced.

This gentleman also claims that "tertiary syphilis" is not properly syphilis, but is to be regarded as a sequel of that disease.

During these discussions upon the unity or duality of syphilis, it seems to have been claimed, that, if two sores can be shown to have been engendered, differing in character and associated with syphilis, that therefore the twain cannot be derived from a common cause. On the other hand the "unitists" hold, that, even though it be admitted that "chancres" and "chancreoids" are different in character, this would not, alone, prove these sores produced from different causes. As "apropos" to this point, we may mention that the German school regard the Hunterian chancre as but an evidence of syphilis, and style our "chancreoid" a "chancre," and do not admit that the "soft sore" is related to syphilis at all.

In the short time allowed, it will not be possible to consider the several doctrines above mentioned; attention is therefore invited to the following propositions:—

1st. The Hunterian chancre is not always inoculable.

This was shown by Henry Lee,—see *Am. Ed. Lancet*, 1859, vol. 1, p. 285;—who details five cases and reports others in which the secretion from true chancres failed to be inoculated, or to induce "chancreoids" in subjects who soon after showed signs of constitu-

tional syphilis. But when these chancres were dressed with sabine ointment, so that a free discharge of pus was induced, the puriform fluid, on being inoculated, developed "chancreoids," both in the syphilitic; and in one instance in which the subject had not suffered from constitutional syphilis. And further, inoculation from such an inoculated chancreoid, produced likewise a soft sore. Other observers have recorded the same results.

These facts show conclusively that the modification of the secretion of a true chancre may produce a chancreoid, or, that the latter may not result from the inoculation; and hence we may infer, that, as in these experiments the syphilitic virus was the foundation of the sore in this instance, that the chancreoid is the offspring of the chancre, and is intimately related to the latter, and that the chancreoid may be the result of local influences, which change the character of the chancre secretion and possibly modify the syphilitic virus.

We may add here the fact that the cases vaccinated at Rivalta, Italy, were not always accompanied with induration at the seat of vaccination. This is important, for, as the matter with which these children were vaccinated, was derived from a hard sore originally, it would naturally be expected that induration would follow the vaccination; but this, often, was not the case, many of the scars being free from induration, and yet constitutional manifestations followed the latter class of cases, as well as in the examples presenting induration.—Am. Ed. *Lancet*, Vol. 2, p. 74, 1862.—

2d, The secretions of secondary syphilis, may, or may not be inoculable.

Thus, Dr. Gjør reports three cases in which such efforts failed and were not followed with any constitutional symptoms upon those who were attempted to be inoculated, even when these parties had not previously had syphilis.—Bumstead, p. 47.—On the other hand Cullerier, Melchior, Robert, Diday, Fournier and Caby have each reported a case in which such efforts succeeded in those already syphilized, and on being further transmitted upon sound individuals produced constitutional syphilis.—Bumstead, p. 46.

Other authorities mention similar cases. Thus, three cases are given in Ziemssen's *Cyc.* vol. 3, by Bäumler, in which similar inoculations were successful. Again, the case cited by Berkely Hall,—Am. Ed. *Lancet*, p. 442, 1864,—in which a man received a wound, which wound was sucked by another man, the latter of whom had

a syphilitic fissure at the corner of his mouth, and thus the former incurred constitutional syphilis.

Again we may refer to the three cases reported by J. A. Marston, in which constitutional syphilis was produced by other means than through the contact of the secretions of primary sores—*Am. Ed. Lancet*, June, p. 462, 1863.—

In further corroboration of this point, may be mentioned the case reported by M. Trousséau, of a healthy subject, who incurred constitutional syphilis from the vaccine matter containing syphilitic virus. The well known disease which appeared at Rivalta, Italy, affords many examples in point, thus a child is vaccinated and a second child from it, and from the two cases sixty-three examples of syphilitic inoculation resulted, and others followed from these.—*Am. Ed. Lancet*, Vol. 2, 1862, p. 72, et seq.—

Thus we present numerous cases of constitutional syphilis, induced from the secretions of the blood of those affected with general syphilis. On the other hand these reports show us, that, occasionally, inoculation, with secondary products do not induce syphilis.

3rd. Secondary syphilis may result from the tertiary form.

The case of Sebastian may be instanced here—see Bäumler, *Ziemssen's Cyclop.*, Vol. 3, p. 62—a child is vaccinated, and from this another child, the latter subsequently presented a pseudo chancre and constitutional syphilis, and the former an extensive papular syphilide. It turned out that the father of the first child had condylomata and other manifestations of syphilis, from which his child derived its disease. Again Dr. Eulenberg's cases—A child three months old is vaccinated, apparently healthy, 140 individuals were vaccinated with the lymph from this child, of which 50 became syphilitic the local symptoms appeared in three weeks, the general in from five to six weeks. The child itself, three weeks later, had condylomata. Later, it was learned that the parents were syphilitic.—See *Ziem. loc. cit.*, p. 63.—

Mr. Pollock, in the late discussion on syphilis in the Pathological Society, London, reports a case of a mother, with tertiary syphilis giving birth to a child, which in three weeks developed secondary syphilis.—See *Lancet*, April 8th, 1876, p. 534.—

Sir John Rose Cormac, reports a case of this description;—see *Med. Times and Gazette*, Vol. 1, p. 224 & 248, 1875,—in which a child suffered congenital syphilis and died, the disease having been contracted from tertiary syphilis in the father.

4th. A chancroid may induce constitutional syphilis.

In this connection, the case of Biddenknap, in which a healthy young woman inoculated herself with matter the result of syphilization, and which was originally derived from an infecting sore; the matter with which she inoculated herself was originally from the secretions of infecting sores, but had passed through many generations and individuals. Pimples resulted immediately, or rather early, and these degenerated into ulcers with and without induration. Later all the sores healed. Later constitutional syphilis resulted.—See Ziem. loc. cit., p. 95.—The case reported by Danielssen is related to this point. A leper, æt. 30, who had never had syphilis, and who had previously been inoculated during five months with matter from soft chancres without constitutional symptoms resulting, was inoculated with matter from a hard chancre, September 25th, which produced chancroids and with the matter from the chancroids he was inoculated until immunity was soon complete, and all the ulcers were healed by the end of October. January 5th, 1858, there is an exanthem upon the scrotum. The beginning of February manifest symptoms of constitutional syphilis appear, ulcers in the throat, etc.

J. A. Marston,—see *Lancet*, Am. Ed. Vol. 1, 1862,—says “I am positive, that a sore on the sheath of the penis, having all the characteristics of a soft sore, and capable of producing its like by auto-inoculation, may be followed by constitutional affection.”

Dr. Kaposi in his late work claims as follows:—1st, soft chancre, with or without suppurating bubo, ends as a rule in a local disease. 2d, the same, with, or without suppurating bubo, is not unfrequently followed by secondary syphilis.—See *Am. Jour. Syph. & Derm.*, October, 1874.

Staff Surgeon Oliver, gives his experience of sixteen years in the army, and says, “the modified form of syphilis, or descent modified syphilis, is in 70, per cent of the “primary syphilis” patients, the form met with; and that not more than 30, per cent of the cases can be considered as true syphilitic chancre, but merely the local evidence of the transmission of secondary syphilis. He adds that, while constitutional evidences will follow the indurated and non-indurated sore, yet the cachexy of syphilis following the non-indurated sore is much less formidable than that following the indurated sore.—See *Journal*, loc. cit., July, 1874, p. 305.—

Victor De Meric, reports a case in which the husband contracted

constitutional syphilis, was married, had nine children,—healthy—the wife showing no signs of syphilis, until, when after many years she contracted it from a soft chancre, during sexual intercourse, and which was located upon the prepuce of her husband. The husband had an impure intercourse, and not seeing anything wrong, in ten days approached his wife, and two days afterward noticed a little irritation of the prepuce, in a few days an ulcer appeared on the mucus membrane of the prepuce, which soon became phagedenic.—See Jour. Syph. & Derm. July, 1874.—

The following is kindly reported to me by Dr. R. M. Dening, of Columbus, O.

An adult man incurred a chancroid ten days after exposure, in May, 1875. The chancroid was cauterized and healed soon, and he mercurialized himself upon his own responsibility. In March, 1876, excavating ulcers of the tonsils and an eruption upon the surface appeared, and still later an iritis. He recovered under the use of mercury.

The same gentleman reports another case; a healthy man æt. 24 years, contracted a chancre on the prepuce, the size of a three-cent piece.

This was followed with a very large open and suppurating bubo, and the doctor who attended the patient before Dr. Dening, removed one of the glands in the groin—no internal treatment up to the time Dr. Dening saw the case.—This chancre came out about three weeks after exposure.—Dr. Dening dressed the suppurating bubo with a solution of the potassio-tartrate of iron and gave the same internally with opium and nourishing food. He also strapped down the bubo with adhesive plaster. Very soon the doctor noticed a number of chancroids about the bubo, produced from the plaster adhering to the hairs and drawing them out from the roots, into the follicles of which the matter from the bubo entered, and thus the chancroids; being satisfied of their nature, and as the disease was auto-inoculable, and according to the dual theory he felt certain he had chancroid, he continued the above treatment and destroyed the chancroids by cauterization. In two or three months the patient was out and the large bubo healed. Now comes the sequel.—He had suddenly a perfectly marked syphilitic eruption all over his body.—This was about two months after he first saw him, and about six months and a half after he incurred the disease.

The doctor was prepared to understand how a primary sore might

be "mixed" in its character, but could not understand how a suppurating bubo should possess the quality of "mixed" as applied to syphilitic sores. Of one thing he felt certain, the patient had syphilis anyway, so he now gave him the proto-iodide of mercury, under which he was cured and has remained so up to the present time.

If we suppose that the first sore was a true "chancre," then the constitutional symptoms must have manifested themselves very late in the history of the case, i. e. — In near seven months from exposure. Such late development we know does occur, but as these phenomena generally appear within two months, it is more probable that the constitutional disease was developed from the chancroids following the bubo, especially as these evidences of the disease developed about two months from the appearance of the bubo-chancroids.

A case occurring in my own practice may be here given:—A healthy man incurred a single chancroid upon the glans penis within five days after exposure; this was the result of one intercourse and he did not have connection with any one after he incurred the sore. This sore was superficial, irregular in its outline, with steep edges, without induration, and had upon its surface a puriform secretion. Regarding it as a chancroid, we gave him a salve of iodoform, under which the sore soon healed; but told him it was not impossible that he might become affected from the sore. He had not had any constitutional treatment. In about two months from the exposure he had a well marked syphilitic eruption with sore throat, which yielded to mercury and iodide of potassa.

My observation both in civil and military practice, teach me that soft sores often are followed with constitutional syphilis, and in conversation with a number of surgeons I learn of their similar experience. It will not do to attempt to account for the poisoning of the system from the "mixed chancre," for there is no evidence of induration, and the local sore is the suppurating, superficial lesion, and moreover it is beyond the "ken" of any one to prove the presence of the matter of "chancre" intermixed with that of the "chancroid."

5th. Infecting syphilitic sore is not uniform in character.

Thus, Dr. Fournier describes, as occurring in women, primary lesions presenting the four following anatomical characters: 1st, the erosive, desquamative chancre, which consists simply in a des-

quamation, epidermic or epithelial, limiting itself to denude, without destroying the derma.

2d. The exulcerous chancre, that which attacks superficially the derma, which skims over, rather than breaks through it.

3rd. The ulcerous chancre, of a depressed, excavated, jagged aspect, which constitutes, or seems to constitute, an ulcer, for most often the ulceration takes place by means of its neoplasm, and does not involve normal tissues.

4th. The flat papulous chancre, which, elevated above the integument, bulging, protuberant, resembles a sort of small disk or papule, precisely analogous to the secondary papule. Dr. Dubec, adds another form of local sore, or rather primary sore, attended with constitutional symptoms, called the "multiple herpetiform syphilitic chancre," and describes five cases occurring in men. These sores are multiple, epithelial erosions, becoming later slightly prominent, under the form of mucous papules, at the moment when cicatrization is about to begin. — See Jour. Syph. & Derm., July and October.—

Dr. Henry Lee says:—See Braith. Retro., Am. Ed., part 52, p. 162.— In practice we occasionally meet with examples of infecting sores which are non-conformable to the description given of the typical indurated sore such as the following:

1st. An initial lesion consisting of a vesicle which becomes a pustule, then an ulcer like a soft ulcer, but which acquires a specific induration at some stage of its progress, or, 2nd, a patient presents himself with one or several, small ulcers possessing the characters of a local soft sore for some time, but before cicatrization a hardness develops itself at the seat of one of these chancres, the ulcerative action and secretion of pus continuing.

M. Gascoyen, states that at first the Hunterian chancre is without induration, and it is well known, that a soft sore often becomes indurated.

Thus, it will be seen, that it is by no means necessary that, induration, or a sore having peculiar characteristics, should constitute the initial lesion, in order that constitutional syphilis may be engendered. On the contrary we know that the merest abrasion, which may wholly escape the attention of the patient, may be the source of the infection.

6th. Can a chancreoid produce a chancre.

On referring to the syphilitic disease as it prevailed at the Rivalta,

Italy; we find that the child Manzone (who was vaccinated with matter from the arm of Chiabrera, the latter of whom had indurated sores, the product of constitutional syphilis,) had, at the seat of vaccination a suppurating sore similiar to a chancreoid. It should be stated, that of the seven children who were vaccinated from Manzone and took the disease constitutionally, five are known to have had soft sores at the seat of vaccination. — See Am. Ed. Lancet, Vol. 2, 1862, p. 75 and 76. —

Now Antonia Sianca was vaccinated from Manzone's arm, and presented a soft sore; later the mother of Sianca, showed two indurated sores upon her breast, which she incurred from her child in nursing it. Again one of the cases described by Bidenknapp, — see Ziem. Cyp. Vol. 3, p. 95—in which a young woman inoculated herself with syphilizing matter which had passed through many generations, two well marked indurated ulcers, and four imperfectly indurated ulcers, followed the inoculations, and subsequently constitutional syphilis resulted.

Again, Prof. Gross says,—see Surgery, Vol. 1, p. 292—“it is well known, that in some individuals soft chancres produce hard, and hard chancres soft, although as a general law like produces like.” Again Mr. J. A. Marston, says “speaking of a soft sore derived from an indurated sore, “that the virus from such a sore however, may induce the hard sore in a person not previously infected, is nearly proved.”—See Am. Ed. Lancet, 1862, Vol. 1, p. 363.—

Again it is well known that, the inoculations from soft sores employed in syphilization, often induce indurated ulcers. Even in the subject being syphilized.

If then a chancre, or rather the virus from a chancre, may produce a chancreoid, and that from the latter may induce the former, these sores must be related, and is it not probable that the same poison therefore, induces either sore.

Bäumler, — see Ziem., Cyp. Vol. 3, p. 88—in speaking of the “mixed chancre,” says, “in another way may the action of both poisons be evinced at the same point of the body,” as for instance, when soft chancre “virus is inoculated upon an existing induration (or hard chancre) syphilitic in character. This has been experimentally demonstrated by Laryonne, Basset, Melchior, Robert and others, with positive results.” The converse of this, viz: inoculation of syphilitic virus upon a soft chancre, is likewise possible.

Although these examples are put forward as proof of the mixed chancre, the fact that a hard chancre can be made to assume the character of a soft, is rather a proof of their close relationship, than that the two sores depend upon different poisons; is rather an argument that the chancre and the chancroid may be mutually inter-convertible. Were they not so, the virus of the true chancre would maintain its sway, and retain its characteristics.

7th. Those who have had constitutional syphilis may incur it again. The case of Mr. DeMeric is in point; a man contracted syphilis, constitutional, went to West Indies, was gone two years, returned home with the faint brown stains of the disease on his skin, contracted fresh disease, presented two well marked chancres on the glans penis, and in a few weeks there appeared a well marked crop of syphilitic lepra. A similiar case is given by Dr. Diday.—See *Am. Ed. Lancet*, 1862, Vol. 2, p. 317.—

Again, see the report of cases of syphilitic re-infection reported by G. G. Gascoyen.—*Eng. Ed. Lancet*, Nov. 28th, 1874.—He reports eleven such cases; in six of these constitutional symptoms resulted, and in four, indurated chancres were the only evidence of contamination. He gives a table of sixty cases of syphilitic re-infection, in most of which mercury had been employed in the treatment of the first attack. Mr. Henry Lee endorsed Mr. Gascoyen's view, and stated he had reported a similiar case. Messrs. Drysdale, Trotter and Myers also believed in syphilitic re-infection.—See *Lancet*, loc. cit.—

Dr. Köbner—see *Jour. Syph. & Derm.*, p. 137—reports a table of forty-five cases of syphilitic re-infection.

It should be stated, that Ricord himself advocates now that syphilis can be retaken, but still holds that it cannot be retaken so long as the system is under the influence of a given attack.—See his remarks at the meeting of the British Medical Association 1872.—

Huggenberger, Diday, Lindwurm, Bergh, Engelstedt and Björken, have given us cases of syphilitic re-infection.—See *Jour. Syph. & Derm.* 1873, p. 130.—

If then syphilis may be retaken as may be variola, rubeola and scarlatina, exceptionally, we submit the question: Is not this re-susceptibility an approach to the re-inoculating character of the chancroid? Or in other words, is it not true that the reproductive feature so common to the chancroid is rarely and exceptionally a

trait of the chancre? And hence may we not infer the intimate relation of the chancre and the chancreoid?

Again, as it is generally true that the constitutional manifestations following syphilitic re-infections are mild in character, is this not an approach to the usual innocence of the chancreoids?

The case of M. Bouley—See Vidal Ven. Dis. by Blackman, p. 292,—who succeeded in producing a second syphilitic infection in a woman laboring under tertiary syphilis, is in point here. Vidal is a firm believer in syphilitic re-infection.—See work *loc. cit.* p. 292.—

8th. The assumption of Hutchinson, that the tertiary form of syphilis is only a sequel of syphilis, and not really the original disease, does not seem to rest on any reliable data.

If, by a sequel, we are to understand the operation of a morbid cause producing an effect differing in character from the original disease, then how can tertiary syphilis be a sequel, since we know that the tertiary form of this disease will give rise to the secondary form of syphilis in offspring. In other words, it does not induce an effect but the original constitutional disease itself.

Having now considered the foregoing propositions we may venture to draw conclusions from the facts before us; in doing this we wish it distinctly understood that we can lay no claim to special skill in the cure of this disease, nor have we that extensive knowledge of the subject of syphilis, which belongs to the masters of this speciality, but we simply present our views as to this affection, based upon authority, and as the malady has seemed to us.

If then the Hunterian chancre is not always inoculable, thus resembling the usual non-inoculability of the soft sore; if the secretions of one affected with secondary syphilis, may be or may not be inoculable, thus again resembling the uninoculability, generally, of the chancreoid; if secondary syphilis may result from the tertiary form; if a "chancreoid" may induce constitutional syphilis; if the infecting sore is not uniform in character; if a chancreoid may engender a "chancre;" and if constitutional syphilis may be retaken, thus resembling the re-inoculating character of the chancreoid; is not the poison which induces the chancre and the chancreoid, one and the same?

What is it which induces the soft sore, so constantly in strict relation with sexual intercourse and the phenomena of constitutional syphilis? What poison can it be, other than the syphilitic, which develops a chancreoid, by inoculation of the secretions of an

irritated hard chancre? What virus can it be other than the syphilitic which to-day brings out a hard and to-morrow a soft sore, for if either may follow the inoculation of the poison, are these sores not dependant upon the same cause?

Why is it, that constitutional manifestations may follow a variety of local lesions, and that even without induration?

Why is it that the "dualists" have been compelled to invoke the aid of the "mixed chancre" to account for the appearance of constitutional symptoms, which so often follow the soft sore?

Is there not to-day a want of confidence in the dual theory, and an evident tendency to syphilitic unity? If this be true, is it not because the dualistic theory has failed clinically?

It scarcely seems, too, that the doctrine of Hutchinson is correct, for he assigns to pus the property of modifying the syphilitic virus, in such a manner as that, the soft sore is generally infecting. As is well known, suppuration is but one of the effects of inflammation going on in this sore, and this gentleman has not shown that, the same kind of a sore cannot be produced by inoculation of the serum of the irritated sore. Further, we know that these soft sores have been produced from vaccination lymph derived from the arms of those who have had constitutional syphilis when vaccinated.

Is it not then more rational to conclude that in these soft sores—chancroids,—some local influence induces a change in the character of the sore, in the whole process of the inflammation going on in the sore, thus modifying the nature of the virus, and causing the sore to differ from the hard chancre.

But, it must be admitted that it is not thoroughly established that the soft sore is constitutionally infecting, although there is strong proof that it occasionally is so. When the affirmative of this point is clearly decided, then will syphilitic unicity receive its greatest support and a dark point in relation to this disease be removed.

The doctrine of "unicity" leads to simplicity, and it certainly is illogical to suppose the existence of two syphilitic poisons, until every argument has been invoked and failed, in behalf of the view, that there is but one such poison.



