CASES
OF
SYPHILITIC REINFECTION.
WITH REMARKS.

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It was long believed that a person who had once been the subject of syphilis was thereby rendered more prone to contract again this disease, and that if subsequently exposed to contagion he would be liable to acquire one attack of syphilis after another. It was further considered that with each new infection fresh poison was absorbed into the system, adding to the virulence of that already lurking there, so as to stimulate and intensify the existing disease.

Such were the current opinions until Ricord taught that syphilis, like smallpox and other disorders of this class, exerts such an effect upon the economy as to protect it from further contamination. This condition he described as a *diathesis* which, as long as it lasts, confers complete immunity from another infection, and renders the person incapable of developing either an indurated chancre or other constitutional symptom. In his experience this protective influence terminates only with the life of the patient, but he admits that by ana-

logy the syphilitic diathesis should in certain subjects wear out and become extinguished, so as to permit a repetition of the disease, just as recurrences of measles, scarlet fever, &c., are occasionally, though exceptionally, met with. At that date, however, he had never known an instance of syphilitic reinfection, and stated that "science does not yet possess a single well-proved example of a second attack of syphilis."¹

In consequence of this statement Ricord has been credited with the dogma that a second infection of syphilis is impossible; but, far from this being the case, he distinctly says—"It is not that I deny the possibility of a repetition of the indurated chancre; on the contrary, *I believe in it*, and I believe in it firmly, although clinical experience has as yet refused me proofs of it."²

The sagacity of Ricord's perceptions on this subject have now received ample confirmation, not only as regards the persistence of the syphilitic diathesis, which generally lasts for many years, and often, indeed, until the end of life; but also as to the occasional extinction of this peculiar influence, so that the patient may regain his former aptitude to contract the disease, for it has been conclusively demonstrated that syphilis may be repeated in the same person.³

The instances recorded amount to a considerable number, but they are mostly scattered throughout the medical periodicals in such a manner as to render them unavailable for general use, and hence they are scarcely known to the profession. I have therefore appended a list of the cases that I have been able to find, with their references, and now proceed to give the details of eleven others which have passed under my own observation.

¹ 'Leçons sur le Chancre,' 1858, p. 159.

² Loc. cit., p. 158.

³ Ricord, in a letter to Mr. Acton, published in the 'British Medical Journal,' 1872, vol. ii, p. 228, now fully admits this, as shown by the following sentence:—"Now, as we have authentic examples of fresh contagions of indurated chancre, with consecutive evolutions of the whole series of constitutional symptoms, this proves that the patients have been cured; just as the possibility of contracting smallpox afresh, or of vaccination again taking, proves that the first variolous or vaccine influence has ceased."

With the exception of one of these cases, the rest have occurred in my private practice ; and although I could give the particulars of several which have come before me at the hospital and elsewhere, sufficiently convincing to myself as examples of syphilitic reinfection, I have purposely excluded them as failing in some respects to satisfy the just requirements of others, and have selected those only which appear to me to be beyond dispute. Of these eleven cases I have myself treated seven (Nos. 1, 2, 3, 4, 5, 8, 10) for both infections. In three (Nos. 6, 9, 11) the former syphilis is guaranteed by competent medical witnesses ; whilst the only one (No. 7) in which there is no evidence of a second infection beyond the patient's statement occurred in a man of great intelligence, who had had some amount of medical reading, and, from my personal knowledge of him, I cannot doubt his veracity or the accuracy of his story.

CASE 1.—November 7th, 1863. A gentleman, æt. 28, in good health, consulted me for a large typically indurated chancre on the corona and glans, with indurated inguinal glands. He had a prejudice against mercury and would not take it for five or six weeks, when, the chancre having increased to nearly the size of a florin and showing no disposition to heal, he commenced a mercurial treatment. In a week the improvement was so marked that all reluctance ceased, and he continued to take the medicine for three or four months, until the induration had quite disappeared. Except a slight sore throat of a doubtful character, there were no constitutional symptoms.

On November 16th, 1867, he showed me an abrasion with a very suspicious base on the inside of the prepuce, the result of connection a week ago, which developed into an indurated chancre ; two other sores also formed and indurated. The inguinal glands could be felt separate and slightly enlarged, but they could not be distinctly made out owing to the large amount of fat in the groins. The sores soon healed under mercury, but the induration did not pass away until the end of February. On May 25th a large mass

of induration had formed at the frænum, and gradually extended half-way around the corona and glans. Much deposit of similar nature had also taken place in the lymphatics on the dorsum of the penis, quite to its root; these hardenings gradually yielded to mercury. Subsequently (October 9th) a gumma formed on the inside of the right leg, which broke, leaving a very obstinate sore; another appeared, but subsided. A few months after this a tertiary ulcer occurred on the leg, and six months later a deposit again took place in the lymphatics of the penis; this symptom was very persistent, and recurred two or three times. His health throughout was good. He has since remained free from disease, and is now the father of two healthy children.

CASE 2.—February 16th, 1864. A farmer, æt. 36, of robust health, covered with a copious eruption of roseola and lichen, following a sore at the corona which is now healed, though a slight induration can still be felt. Under mercurial treatment all symptoms disappeared, and he remained free from disease until—

November 12th, 1870, when he came to me with a severe eruption of roseola and psoriasis, and mucous papules of the throat. He said that after intercourse in July a sore formed on the inside of the foreskin, which healed without treatment about the end of August. The eruption began to appear three weeks ago. Under mercury these symptoms passed away, but he had several relapses in the form of psoriasis, mucous papules of the throat and anus, superficial ulcerations on the trunk, scrotum, &c., which required treatment at intervals until the summer of 1873. He has since continued well.

CASE 3.—June, 1864. A healthy man, æt. 22, contracted a chancre three months ago, which has healed; has now severely ulcerated mucous papules of the throat, fauces, and palate, very extensive and very persistent, with a fading eruption of roseola and psoriasis. He recovered under mercurial treatment, and remained free from all trace of disease until—

May 9th, 1873, when he showed me three indurated chancres on the inside of the foreskin, the result of connection about a fortnight since. Each sore was situated on a well-defined induration, and could be picked up between the fingers as a small button-like mass. The inguinal glands were not affected. Mercury was given. On the 24th the sores were nearly well, but the induration was still quite perceptible. I have not heard of him since, though he promised to inform me if anything else occurred.

CASE 4.—January, 1865. A healthy man, æt. 34. General roseola, with universal enlargement of glands, the result of infection probably in August 1864. There had been great pain and aching in the limbs previous to the appearance of eruption. He had had no treatment. In April he had very severe psoriasis of the trunk and limbs, followed by double iritis and great impairment of health. He now commenced mercury, but took it very irregularly. He continued in a cachectic state, having at intervals double orchitis, ulcers of the leg, and nodes, until 1870, since when there have been no visible manifestations of the disease; his health, however, has remained much enfeebled, and he has suffered from a lung affection considered to be of syphilitic origin.

In February, 1873, a large indurated chancre formed on the left thumb; it commenced as a pustule, and was contracted on January 24th from a patient who had two suppurating indurated sores on the foreskin, which were followed by roseola. The induration on the thumb was well marked, and the lymphatics over the metacarpal bone became swollen, hard, and tender on pressure, but neither the epitrochlear nor the axillary glands were affected. During March there was much nocturnal aching of the legs, but no other symptoms. No treatment.

CASE 5.—August 12th, 1865. Clerk, æt. 32, thin, delicate-looking man. A very large indurated chancre at the corona, involving the glans and prepuce, inflamed and sloughing from

the application of nitrate of silver; inguinal glands much enlarged and painful. Mercury was given when the inflammation had subsided. He had subsequently a roseola and sore throat, on recovery from which he remained free from disease until—

August 3rd, 1871, when he came to me with a small indurated chancre on the dorsum of the penis, which commenced as "a pimple" after connection a week ago.

On the 7th the sore was as large as a threepenny piece and the induration well marked; the glands in the groins were enlarged, one on the left side ultimately suppurated. I gave him mercury. At the beginning of September the sore and bubo were nearly healed, and he ceased to attend.

CASE 6.—May 25th, 1866. A fine healthy man, æt. 30. Indurated chancre on inside of prepuce, which commenced as a pustule directly after intercourse on April 7th, and another on the opposite side of the foreskin which appeared a fortnight after the first; there were also cicatrices of two or three other sores; inguinal glands indurated, one on each side soft and painful; patches of roseola on shoulders and arms. Has been taking iodide of potassium for more than a month. Under mercurial treatment the sores healed and the eruption disappeared.

The patient told me that in 1857 he had a chancre followed by secondary eruption, and in 1858 severe palmar psoriasis; was treated actively with mercury on each occasion, and has remained well until now. This statement was confirmed by the medical man who had previously attended him.

CASE 7.—October 17th, 1866. Journalist, æt. 24; strumous habit; family phthisical. Scattered pustular eruption of face and trunk; mucous papules on lips, cheeks, and throat; induration perceptible at corona; inguinal glands indurated. Contracted a chancre five weeks ago when travelling, and has had no treatment. He recovered slowly under mercury, and I did not see him again until March 21st,

1871, when he presented himself with a general pustular eruption of the face, trunk, and limbs, and in a very cachectic condition. He had been shut up in Paris during the siege, and had lived very badly. He told me that he had kept free from disease until the end of 1868, when he got another chancre, which was followed by a severe eruption; under medical advice in Germany and Paris he took mercury for several months, and had no relapse until these spots began to appear about six weeks ago. I again gave mercury with tonics. He soon improved, and has remained well up to the present time.

CASE 8.—July 10th, 1868. House decorator, æt. 28; healthy man; indurated chancre at meatus, extending nearly half an inch down the urethra, so as to diminish sensibly the stream of urine; induration very marked; glands in groins indurated, one on each side tender on pressure. Noticed the sore ten days after connection, and has been under treatment for six weeks. He gradually got well with mercury, but required the use of a bougie for several months to keep the meatus dilated. He had no constitutional symptoms.

On July 30th, 1870, he again consulted me for a well-marked indurated chancre on the inside of the foreskin, with cicatrices of other sores, and urethral discharge. The glands in the groins were indurated; spots of psoriasis were scattered over the trunk and limbs, which first appeared about three weeks ago, and the fauces were covered with mucous papules. The infecting intercourse occurred about three months ago, and he has had no treatment. Under mercury he rapidly got better, but he had several relapses, necessitating treatment for nearly a year, his throat being especially troublesome.

December 7th, 1872.—He showed me a chancre at the upper part of the corona, the result of intercourse ten days ago; the base was distinctly indurated; the inguinal glands were not affected. The sore continued to spread until mercury was given, when it slowly healed. During treatment mucous papules came out on the cheeks and fauces;

the inguinal glands also enlarged, and one in the left groin suppurated. I saw him in the summer of 1873; he was then quite well, and had had no eruption.

CASE 9.—October 19th, 1868. A healthy man, æt. 26. Indurated chancre on inside of prepuce, nearly as large as a threepenny piece, on a base which can be raised like a button between the finger and thumb. The intercourse occurred ten days ago, and he noticed an abrasion four days afterwards, to which he applied nitric acid and latterly bluestone. The sore is inflamed and suppurating freely; the inguinal glands are not generally affected, but one on the left side is large and tender. He would not take mercury, as he wanted "to see if a man could have secondaries as well as an indurated chancre twice." The chancre soon healed, but induration was very perceptible on December 3rd. I have not seen him since. He told me that six years ago he had an indurated chancre at the corona followed by severe eruption, for which he was treated with mercury, and has had no return of the disease.

CASE 10.—April 13th, 1871. A healthy man, æt. 22. Indurated chancre at frænum, another at corona, both suppurating; inguinal glands indurated. Contracted disease eight or nine weeks ago; had a crop of sores around corona, which healed, but about a month ago these two re-ulcerated. Has been taking mercury in small doses throughout. I gave him larger doses, even to sixteen grains of blue pill daily, but without affecting his gums in the slightest degree. The chancres healed, but on May 20th they again opened, and extensive mucous papules appeared on his tonsils and fauces.

July 11th.—The induration had completely disappeared, and his throat was well. He had no further symptom of disease until—

April 18th, 1873, when he showed me an abrasion at the corona following intercourse three days ago.

21st.—The abrasion had spread, and its base was suspiciously hard.

23rd.—Chancre with well-marked induration was now developed; the inguinal glands were not affected.

Mercury soon produced its effects upon the gums, and on May 1st the sore had healed, but the induration could be felt for two or three weeks.

In October, 1874, he again came under my care for a small non-indurated chancre, with suppurating buboes, when he told me that in the summer and autumn of 1873 he was under treatment for several weeks with "a syphilitic sore throat."

CASE 11.—January 27th, 1874. Female, æt. 20; readmitted into the Lock Hospital for an ulceration of the os uteri and utero-vaginal discharge. There was a distinct induration on the margin of the right labium, the sore having just healed; glands in both groins markedly indurated; mucous papules on the tonsils and fauces; tongue fissured and sore at edges. Under mercury the induration and other symptoms subsided. No reliable history could be obtained as to the present infection except that the sore had existed to her knowledge for two or three weeks.

On April 4th, 1872, this patient was admitted into the Lock Hospital under my colleague Mr. James Lane. The case-book records that she had a large ulcerating sore on each side of the vaginal orifice, with a deep foul ulcer at the anus and indurated inguinal glands, followed by psoriasis. She was treated with mercury.

From the above cases it will be seen that the interval which occurred between the two infections varied from a year and nine months (No. 11) to more than nine years (No. 6), and that the severity of the second attack bore no relation whatever to that of the first, nor yet to the length of time which had elapsed since the previous disease.

Of the ten cases in which the first contagion gave rise to general syphilis, in four (Nos. 3, 4, 5, 9) the reinfection

showed itself in the form of an indurated chancre only, but in the other six (Nos. 2, 6, 7, 8, 10, 11) undoubted constitutional symptoms again occurred, and in one case (No. 2) much more severely than at the first attack six and a half years previously.

In the case (No. 1) where the first disease was limited to an indurated chancre with inguinal adenopathy, the reinfection was followed by the tertiary form of syphilis, without the intervention of any secondary affection.

It may be urged that this case cannot be considered an example of syphilitic reinfection, as no general symptoms followed the first contagion; but if a sore with induration of its base and associate glands be regarded as syphilis, this objection cannot hold, for induration was present in such a marked degree that it would have served as a typical case of indurated chancre. If, therefore, we admit with M. Follin that "an indurated chancre with its adenopathy is, indeed, already constitutional syphilis"¹—and few, I think, will dispute the position—this case must be admitted into the list of second contagions.

The induration which forms at the base of a chancre is, I consider, proof that the disease has ceased to be local and has become general. It is the first expression of a constitutional taint which manifests itself at the point of inoculation, and therefore is not one of the local processes of primary syphilitic ulceration. If this view be correct induration is the earliest of the secondary symptoms, and its presence is as pathognomonic of a general syphilitic contamination as eruption or mucous tubercles.

The above case also illustrates what I have observed in others—that where the induration has been very great the eruptive stage would generally be slight, or sometimes even altogether omitted. It is as if the syphilis had in such instances run its course or become exhausted in developing this one symptom of induration, just as we occasionally see that with a transient roseola or slight outbreak of mucous tubercles the disease will come to an end and give rise to no further

¹ 'Traité de Pathologie Externe,' t. i, p. 740, 1861.

manifestations. My experience does not accord with those writers who state that a large amount of induration is a certain prelude to a severe attack of constitutional disease, but rather the reverse.

Another peculiarity attended this patient at his second contagion—tertiary lesions followed upon the chancre without the intervention of any of the so-called secondary affections. I have seen this previously in a few cases, but, except in the present instance, it has always been in strumous persons or in those whose health was much enfeebled.

The eighth case is especially interesting as showing the extraordinary receptivity of the patient for the syphilitic poison. In July, 1868, he had a very large indurated chancre of the meatus and urethra, which lasted many weeks; inguinal adenopathy was well marked, but he had no general manifestations. In July, 1870, he contracted other indurated chancres with implication of the glands, followed by persistent eruption and mucous papules. In December, 1872, he again contracted an indurated chancre attended by glandular swelling in the groins and mucous papules, thus showing three separate infections within four years. It is the only instance of the kind I have met with; but Diday, in his very interesting monograph on this subject, mentions a patient in whom four distinct infections occurred,¹ and Mr. Hutchinson has related an example of three separate contagions in the same individual.²

Remarks.—These cases of syphilitic reinfection are of much practical value in showing that the effects of syphilis upon the system are not of necessity life-long; but that the diathesis, or *intoxication*, as some prefer to call it, created by the disease may gradually wear out and become extinct so as to allow another infection. For we cannot admit that a

¹ 'De la Réinfection Syphilitique', Obs. xiv. See also 'Gazette Hebdomadaire,' 1855, p. 238.

² "When and how to use Mercury in Syphilis," 'Lancet,' 1874, vol. i, p. 157.

person already under the influence of syphilis can suffer another general contamination, and thus become the subject of two concurrent attacks of the same disease, each of which must be passing through a different stage of development.

The possibility of reinfection proves also that a syphilitic person may entirely regain his former condition of health, and, therefore, become the father of healthy offspring. Thus is explained a circumstance with which we have long been familiar, that persons whom we know to have been the subjects of syphilis will apparently recover from it, remain free from recurrence for the rest of life, and beget healthy children without a trace of hereditary disease. Such instances, and happily they are not rare, would lead to the conjecture that the disease cannot be merely in abeyance, and biding its time for a fitting opportunity to again break forth, but that it has been completely got rid of; and the fact that a second infection is possible proves that such may really be the case. Nor would it seem that instances of recovery from syphilis are very uncommon, for we have clinical evidence of it in such observations as those just alluded to, whilst the published cases of a second contagion now amount to a considerable number.¹

These cases of syphilitic reinfection bear also with peculiar significance upon a much debated, though most important, question—viz. *the curability of syphilis*. In the instances here related, as well as in most of those recorded by others, a full treatment by mercury had been adopted, thus affording, should it still be really needed, additional testimony to the therapeutic value of that drug in syphilis, and confirming the opinion of those who state, as the result of long experience, that a prolonged course of mercury is the most certain method of preventing the more severe, as

¹ The cases which form the subject of this communication are, I believe, the first which have been recorded in this country, but the accompanying table shows as many as sixty which have been collected from various publications.

well as the more remote, lesions of syphilis. Great encouragement is, therefore, given to persevere in this mode of treatment, inasmuch as it offers a reasonable hope of *curing* the disease.

Many other points of interest are opened by these cases, to some of which I will refer, though they have but an indirect bearing upon our present subject.

They seem to throw much light on the real import of the induration which usually accompanies an infecting chancre, and is regarded as a necessary part of primary syphilitic ulceration rather than as one of the manifestations of general syphilis. When inoculation of an indurated chancre succeeds upon a person already the subject of syphilis, an ulcer with a *soft* base is produced, which in no respect differs from an ordinary non-indurated chancre, either in its appearance or behaviour; but, although no induration attends this sore, its real nature is in no respect altered, for when transmitted to a healthy individual a chancre forms which becomes indurated and gives rise to constitutional disease. Here, then, we see that although an infected person cannot escape the local action of the syphilitic poison—as evidenced by the formation of an ulcer—yet no induration is produced by it; a circumstance which, to my mind, shows conclusively that this symptom is not one of the local processes essential to the development of a particular form of chancre, but that it entirely depends upon a constitutional cause, which is unable to manifest itself as usual at the point of inoculation, in consequence of the economy being already under the influence of a former contamination.

The presence, then, of induration about a sore shows in the first place that the system was free from a previous syphilitic taint; and, in the second, that the patient is under the influence of a general syphilis of recent date; so that the formation of an indurated chancre in a person who has formerly had syphilis proves that he must have completely recovered from the foregoing attack.

Again, that induration is a constitutional symptom, and

not a local phenomenon, is seen in the fact that a person who has an indurated sore, but is as yet without any other manifestation of syphilis, will, if exposed to contagion, contract a chancre with a soft base, but not another indurated sore; and the same result obtains from the spontaneous or artificial auto-inoculation of the original chancre.

I claim, then, on the above grounds, that the induration at the base of a chancre is as certain evidence of a general contamination as any of the recognised secondary symptoms, and that when a chancre has become indurated it has ceased to be a primary affection.

Another thing which may be learnt from the cases just related is that a period of incubation does not necessarily precede the evolution of an indurated sore, for in most of them the chancre which initiated the second disease followed directly upon intercourse. This shows, I think, that the contagion must have been acquired from a primary sore which was still suppurating and in full activity, rather than from an indurated chancre which had ceased to suppurate, or from that very common cause of infection—mucous tubercles; in other words, that the disease must have been received from a *primary*, and not from a *secondary*, lesion of syphilis.

As long as the local processes are active about a chancre and it continues to suppurate, it is highly virulent and capable of ready inoculation, producing at once a pustule, succeeded by an ulcer, which in the case of the infecting chancre usually begins to indurate about the fifth to the eighth day. The inguinal glands take on a similar action about the same time, and as the chancre becomes indurated it passes into an indolent condition and ceases to form pus.

When the serous secretion of such a sore is inoculated it no longer gives rise to the same phenomena as those which follow the insertion of chancrous pus, but they are so precisely analogous to those which have been observed to attend the inoculation of mucous tubercles or the blood of a syphilitic person, by direct experiment, that the same description will

suffice. In both, a little reddening follows the puncture, which soon dies away, but after a period varying from three to six weeks a hardened papule begins to form at the point of insertion; this slowly enlarges, desquamates on its surface, and finally ulcerates. The glands also become simultaneously affected.

Both these modes of development, which have been seen to attend artificial inoculation, are met with in practice as the result of physiological contact. In some cases the sore follows immediately after connection, whilst in others there is a delay of varying length, known as the *period of incubation*, before the formation of the ulcer. When incubation occurs it shows that the infection has been received from some constitutional lesion of syphilis, or from an indolent non-suppurating indurated sore, which, as before stated, I look upon as a truly secondary affection. When, however, the chancre follows at once upon intercourse, its origin may be assigned to an active suppurating sore of recent date—a *true primary chancre*.¹

In the one instance there is afforded an illustration of *secondary*, and in the other of *primary* syphilitic inoculation by natural means; and the resulting chancres at first differ as much in their appearance and conduct as in their mode of evolution, although the sore which occurs from primary inoculation may gradually lose its characteristics, and, becoming indolent, assume those of the chancre which is produced by the inoculation of secondary syphilis.

The propagation of syphilis is, I believe, greatly due to contagion imparted during its secondary stage, and hence the frequency with which examples of secondary inoculation—those in which a period of incubation is present—are met; so much so, indeed, that some modern authors altogether deny the *début* of syphilis by a pustule. The older writers, however, speak of this as the usual commencement of syphilis, and certainly clinical observation will lend testimony to its occurrence in a number of cases. A primary chancre gives rise to pain,

¹ I have had opportunity of verifying this statement in three or four instances by an examination of both the persons concerned.

and attracts the attention of the patient, who perforce abstains from intercourse for a time, and seeks relief for it. The secondary contagious affections, such as mucous tubercles, on the other hand, are generally painless and often pass unnoticed, so that the person continues to spread disease in ignorance of his dangerous condition.

The syphilitic poison loses in virulence and in its ready inoculability with the lapse of time, until at length a period arrives when it ceases to be communicable. The secretion, therefore, of an active primary sore is more powerfully contagious than that of a secondary affection, whilst that of the more advanced lesions is altogether incapable of inoculation. It would seem also that persons who have had syphilis, instead of being more liable to contract again this disease, as was formerly believed, are in reality less so; their receptivity apparently having been diminished by the former attack, and a stronger virus may therefore be required to infect such individuals than in the case of those who have never suffered, and who are consequently susceptible to the influence of a weaker poison. A person who has not had syphilis may, therefore, become contaminated by a secondary accident which would prove powerless to infect one who has had the disease; and thus, perhaps, a partial explanation may be afforded why in these examples of syphilitic reinfection a period of incubation does not more often precede the development of the chancre, since it is not improbable that the contagion has been acquired from a primary syphilitic ulcer, in which case the sore would follow immediately upon intercourse.

The comparative rarity of cases of second infection may perhaps to some extent be referable to the stronger virus of a primary chancre being necessary to excite a general reaction when the feebler virus of mucous tubercles would fail to do so; or it may be that the secretion of these latter is too weak to produce more in such individuals than a slight manifestation at the point of insertion which is overlooked.

The reason why in so many instances the disease has been

limited to an indurated chancre may possibly be that, although the former diathesis was sufficiently extinguished to allow another infection to take place, yet the system had not regained its normal condition sufficiently to permit an outbreak of general disease, and consequently the effect of the poison was limited to ulceration at the point of insertion, about which induration, the first and slightest of the constitutional symptoms, was developed. But that these chancres, even when they do not give rise to any other symptom than induration, are powerfully infecting and capable of causing severe disease in a healthy subject, has been shown by Diday in a case which occurred in his own practice; and it has further been proved that such chancres have been derived from specifically indurated sores which were followed by constitutional disease in the persons transmitting them.¹

Some of these cases of second contagion aid also in determining the position which certain of the manifestations known as *tertiary* actually hold in the rôle of syphilis; whether the more advanced of them are really due to the persistence of the disease and its still active presence in the system, or whether, with Mr. Hutchinson, we are to regard them as evidences of injury inflicted upon the economy by a disease which has now come to an end.

This latter view of the subject receives strong support from the circumstance that the more remote affections are, so far as we know, incapable of transmitting the disease from which they originated, either by contact, inoculation, or inheritance; and further confirmation is also afforded by some of these instances of reinfection, for no less than six of them occurred in persons who were suffering at the time from tertiary syphilis.² Unless, then, it be conceded

¹ Loc. cit., Obs. 6, 8, 9, pp. 8, 9, 10.

² DIDAY.—‘De la Réinfection Syphilitique,’ 1862, pp. 26, 27, Obs. xxix, xxx. BOULEY.—‘Annales des Mal. de la Peau et de la Syphilis,’ October, 1851; vol. iv, p. 9, Obs. ii. KÖBNER.—‘American Journal of Syphilography and Dermatology,’ April, 1873; vol. iv, p. 134, case viii. MERKEL.—Referred to by Köbner in above journal, p. 135. CASE IV related in this paper.

that two distinct attacks of general syphilis can coexist in the same individual, we must conclude that the so-called tertiary accidents which were present when the reinfection took place are merely the tokens of a bygone malady, and not the evidences of an existent disease.

But, whilst admitting that certain of the symptoms now classed as tertiary are merely the consequences of a lapsed syphilis, I cannot doubt that the earlier of them should be placed to the active operation of the syphilitic poison. It is true that they occur at a time when the economy has been subjected to the lowering influence of syphilis for a lengthened period, and possibly the peculiar forms they assume may be determined by the constitutional impairment, and so modified by it as to acquire the characteristics of those idiopathic affections which result from depraved health or defective vitality, however occasioned; but at first they so generally respond to the influence of special remedies that I am compelled to believe that they must be due to the continuous working of the disease in the system. A time, however, comes at length—marked by grave cachexia, unhealthy plastic deposits, and intractable ulcerations—when specific treatment ceases to be of service, and when tonics, liberal diet, and general care prove far more beneficial than special medicines; when this condition is reached the lesions attending it do not, I think, result from a still active syphilis, but from the degradation which the blood and tissues of the body have suffered in consequence of its previous effects.

I must apologise to the Society for the lengthy digressions in this communication, but the cases seemed to lead to the consideration of certain points still unsettled, the interest and importance of which must be my excuse for having introduced them.

TABLE of Cases of Syphilitic Reinfection.

Author.	No. of cases.	Reference.	Remarks.
Bergh ¹	2	Hospitals Tidende, Mar., 1865, Copenhagen	Both patients had constitutional disease as the result of the reinfection.
Bjorken ¹	1	Upsala Läkarefornings Förfhandlingar, iv, 7. pp. 597-624	The patient had general syphilitic symptoms from the second contagion.
Bouley	1	Annales des Maladies de la Peau et Syphilis, vol iv, p. 9, Obs. 2. Also related by Vidal, (de Cassis), Traité des Maladies Vénériennes	This was a case of successful inoculation from mucous tubercles in a woman suffering at the time from tertiary syphilis.
Boulongne	2	Recueil de Médecine, de Chirurgie, et de Pharmacie Militaires, 3e série, t. ii, p. 428, 1859. Also reported in the Gazette Médicale, 1859.	Both of these patients had indurated chancre and constitutional symptoms following the second infection.
Beauchet.....	1	Moniteur des Sciences Méd. et Pharm., Jan. 14, 1860. Also mentioned in Recueil de Méd., de Chir., et de Pharm. Militaires, 3e série, t. iii, p. 181, 1860	Indurated chancre and general syphilis resulted from the reinfection. Obs. xxiv of Diday's series.
Coote (Holmes)	1	Report of Committee appointed by the Admiralty to inquire into Pathology and Treatment of Venereal Diseases, 1867, p. 343	Constitutional symptoms followed the second infection.
Dardel.....	1	Gazette Médicale de Lyon, Août 16, 1865	Eruption followed the reinfection.
Delestre	1	Gazette Hebdomadaire, 1860, p. 56. Also reported by Follin, Traité de Pathologie Externe, t. i, p. 740, 1861, and Presse Médicale, 1860	Indurated chancre and constitutional disease resulted from the second contagion. The patient was seen by Ricord, Cullerier, and Puche; he had been under Ricord's care for chancre and eruption 20 years previously.

Author.	No. of cases.	Reference.	Remarks.
Diday	27	De la Réinfection Syphilitique, 1862, and also Archives Générales de Méd., Juillet et Août, 1862	Thirty cases are given by Diday, but Obs. 18 was reported by Rodet, Obs. 23 by Follin, and Obs. 24 by Beauchet, in whose practice they respectively occurred, and they are placed, therefore, under these authors. Of the remaining 27 cases, 14 had an indurated chancre only for second infection, 8 had constitutional disease as well, 2 were cases of indurated chancre in persons at the time under the influence of tertiary disease, and 3 had indurated chancre only for the first contagion.
Engelsted ¹	1	Bericht über das Commune Hospital in Kopenhagen, 1868, p. 115	This patient had constitutional syphilis.
Follin	1	Traité de Pathologie Externe, t. i, p. 740, 1861. Also reported in Gazette Hebdomadaire, 1854, t. i, p. 213; and referred to by Vidal (de Cassis), Traité des Mal. Vénér., 2e édit., p. 406	Had been in the Hôpital du Midi, under Puche, three years before, with indurated chancre and bi-inguinal adenopathy, but no other general symptoms. Indurated chancre and eruption for second infection. Obs. xxiii of Diday's series.
Hardie	1	Report of Admiralty Committee on Venereal Diseases, 1867, p. 162	Eruption followed the second contagion.
Hilton.....	1	Ditto, ditto, p. 399	Eruption resulted from the reinfection.
Huggenberger ¹	2	Zur Frage von der Einmaligkeit der Const. Syphilis. Petersburg Med. Ztschr., 1862, Bd. 3, p. 161	Both patients had general syphilis.

Author.	No. of cases.	Reference.	Remarks.
Hutchinson ...	2	Report of Admiralty Committee on Venereal Disease, 1867, p. 288. This case is referred to also in Reynolds' System of Medicine, vol. i, p. 293 Lancet, 1874, vol. i, p. 157	Both these patients suffered from constitutional syphilis as the result of the second contagion. This patient had three distinct attacks of syphilis.
Köbner	8	American Journal of Syphilography and Dermatology, April, 1873, p. 128, translated from the Berliner Klinische Wochenschrift for November, 1872	In six cases the second infection showed itself in the form of indurated chancre only; in the other two general syphilis was also present. One of the former cases occurred in a patient suffering from tertiary disease.
Lindwurm ¹ ...	1	Würzburg, Med. Ztschr., Bd. 3, Hft. 3, p. 153	Constitutional symptoms resulted from the reinfection.
Merkel, Joh. ¹ ...	1	Bair. Intellig. Bl., 1869, 22	Chancre and eruption occurred whilst the patient was suffering from syphilitic disease of bone.
Rodet	4	Union Médicale, Août, 1857, p. 425, et seq. The second case has been published in the Gaz. Méd. de Lyon, 1857; also by Diday, De la Réinfection de la Syphilis, 1862, Obs. xviii; and by Follin, Traité de Path. Ext., t. i, p. 740, 1861, Case 2	All these cases had constitutional disease following the reinfection.
Zeissl ¹	1	Syphilis Constitutionnelle, p. 48	The second contagion was in the form of an indurated chancre only.

¹ For most of these cases and their references I am indebted to a paper in the 'American Journal of Syphilography and Dermatology' for April, 1873, "On Reinfection in Constitutional Syphilis," by Dr. Heinrich Köbner, translated from the 'Berliner Klinische Wochenschrift,' November, 1872.

In analysing these 60 cases it will be seen that in 35, constitutional symptoms followed the second contagion; in 20, indurated chancre alone was the result; in 5, an indurated chancre occurred whilst the patient was still suffering from tertiary disease; and in one of these (Merkel's case) a papular eruption also showed itself. The large number of cases attended by general manifestations may, perhaps, be accounted for on the surmise that many practitioners who have met with an indurated chancre in subjects whom they knew to have had syphilis previously, have not placed them on record, thinking that they must have been mistaken as to the character of the sore, or that it had become hardened from some extraneous cause, and consequently have reported only those instances which were attended by constitutional symptoms. But this might lead to error as to the comparative frequency with which a second contagion is followed by general symptoms, for when several cases have been observed by the same individual it has been found that an indurated chancre only is the most common result of reinfection, as may be seen by reference to Diday's and Köbner's cases. My own series, though, gives a different return.