REPORT
UPON
SYPHILIS,
WITH REFERENCE TO THE MORE MIXED AND UNUSUAL
FORMS OF THE PRIMARY SYMPTOMS.

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IN the following paper the writer desires to speak of syphilis, as it is presented to the army medical officer, with especial reference to its more unusual, mixed, and anomalous forms. For the sake of brevity, he wishes it to be understood that he has not here recorded all the observed facts, but such only as may directly point and illustrate his observations.

Recognising, as every one must, the general truth of Ricord's teaching, it was not long, however, before the author discovered that the etiology and pathology of this disease were by no means so settled as the positive assertions of the French school would lead us to believe. When model cases presented themselves, the diagnosis

and prognosis were easy. That a case of indurated, indolent, non-suppurating, single sore, preceded by a relatively long period of incubation, with symmetrical affection of multiple inguinal glands, and without any tendency upon their part to suppurate, was surely followed by constitutional symptoms, was true enough. Likewise was it true that multiple, soft, suppurating sores, following a relatively far shorter period of incubation, with open bubo, and both chancres and bubo giving a highly contagious auto-inoculable virus, were the products of a local process only. But it was the frequent occurrence of mixed cases, of sores of various kinds and forms, that offered such great difficulty.

Putting aside all question as to the objective signs by which an infecting can be differentiated from a non-infecting sore, there can be no doubt whatever that these two varieties or species exist. Not only is this proved by the result of daily observation and experience, but it has been more positively established by the experimental proofs obtained by confrontation and syphilization. Danielssen, as the result of his inoculations of patients suffering Norwegian leprosy with chancrous virus, never found constitutional symptoms to follow, with one exception; and herein the virus was obtained from an indurated sore.¹

In typical examples, what peculiarly marks the soft chancre is a solution of continuity of the soft parts by an ulceration and suppuration, having in its origin and progress an intimate connexion with an active inflammatory process. In the infecting form we observe a slower process of abnormal nutrition in the part affected, by which is induced a localized product partaking of the nature of a morbid growth, without any necessary relation to inflammatory phenomena: for these reasons it is

¹ In this instance the inoculation was at first followed by the usual reaction. At the end of one month, however, the ulcer became specifically indurated, and secondary infection of the system subsequently followed. The interest and bearing of this fact will be perceived by the reader hereafter.

relatively chronic in its course, and capable of removal by a gradual process of absorption, without the production of pus, or any loss of substance. In the first, the virus (as holds in the case of a mechanical substance) may pass by the lymphatics, be arrested at the nearest gland, and there induce a repetition of that same inflammatory process it originally caused; while in the second, the sphere of influence exerted by the virus is much wider, affecting the vascular as well as the lymphatic absorbents, by which it happens that the blood-elements, passing through both the chancre and gland-structure, become affected.

That the primary, and a few of the forms of secondary syphilis are contagious, has been settled by experiment and observation.

There would seem to be good grounds for believing that syphilis, as a disease, has a wider sphere of contagion than is generally attributed to it. Positive facts there are in abundance to make one hesitate before giving a decided opinion as to the absolutely non-contagious properties of any of the fluids obtained from the body of a syphilitic patient.

Without going so far as Langlebert, in believing that by far the larger proportion of syphilitic sores are the products of a virus from secondary lesions, we are met by great difficulties in explaining the earlier history of syphilis and the continuance of the disease to the present date, unless we believe in the contagiousness of other than the primary symptoms.

It would be a libel upon humanity to suppose that men suffering from primaries willingly spread the disease; and it is impossible to explain how a woman can infect many persons over a long period, if the uterine discharges, so commonly present in women constitutionally syphilised, are not also the vehicles of contagion.

What requires to be determined is—those conditions of system of a person suffering from syphilis which render the secretions so active at one period, as compared with another; and likewise the state of the system of the recipient of the virus, rendering him liable to take the disease.

The majority of cases of infecting sore are not pustular at their commencement, this form belonging almost exclusively to the soft, non-infecting sores, as Mr. Henry Lee has pointed out. Suppuration is not the ordinary pathological product of true syphilis.

The ulceration or erosion in an infecting sore is ordinarily very limited, not commonly penetrating the whole thickness of the skin or mucous membrane, although the induration may have a much deeper seat.

From an infecting sore so characterised some epidermic or epithelial scales will necessarily be mixed with the scanty excretion obtained from its surface, in addition to lymph-cells, which will approach the characters of pus, as the infecting possesses the characters of the non-infecting sore, viz., depth of erosion, activity of progress, and vascularity. The line of demarcation between the two sores, however, is not easily drawn from the character of the discharge alone.

Ricord himself taught the *unicity* of the virus, and referred the varied products to modifications induced by the constitution, &c., of the individual. He also long believed that auto-inoculability afforded a positive test of syphilis.

Asserting that an indurated chancre was the only portal through which the virus gains admission to the system, Ricord was compelled by his observations to perceive that such induration varied much in degree.

Mr. Henry Lee had the merit, in 1856, of pointing out the difficulty of auto-inoculation from an indurated sore. There seems now to be good ground for supposing that the two varieties of sore, infecting and non-infecting, ought to be regarded rather as separate species, depending upon a duality of virus.

Besides the proofs offered by Mr. De Meric, Diday, De Clerc, and Rollet, we have the exhaustive series of observations by Bassereau to prove that neither in age, sex, constitution, nor tissue really lies the cause of the differences between the infecting and non-infecting sores, irrespectively of a specific cause or virus; to differences in which we must look for this duality in the diseases.

A battery of artillery was stationed at Christchurch during eight months. Among all the cases of venereal (of which there were many) in one only was an infecting sore present; and in this instance I learnt that the virus was a London one, although contracted at Christchurch.

It would be right here to notice the opinion held by many as to the accumulative action of several venereal sores, contracted at different times. Recognising that an individual may have repeated attacks of primary sores, and that secondary disease often follows the last standing in the series, they have come to regard the constitutional symptoms as due to the accumulation; in short, that it was "the last straw that broke the camel's back," and not that the last of the series differed from the others in nature, and was itself the cause of the secondary infection.

Now, if we have regard to syphilitic disease as a whole, we find the morbid chain of phenomena too definite in type, and regular in order, to support such a view; not to mention the positive facts in abundance of secondary infection following the first contracted primary sore, if of infecting type.

That the appearance of secondary symptoms may be irregular and protracted in some cases is doubtless true. Constitutional symptoms, the product of a prior infection, may thus appear after the healing of a soft sore, and may be erroneously referred to it as the cause.

It is now many years since Lawrence pointed out that the physiological properties of tissue effect modifications in the character of venereal sores. Ricord, in twenty-five years' experience, never saw a well-marked soft chancre upon the face. This negative observation is now opposed by the experience of Continental inquirers,¹ and the chief ground for supporting the doctrine of a specific unicity of the virus has been cut from under the feet of those who hold that view.

When an ulcer is wide, though superficial, and the tissue

¹ Puche, Rollet, and Bassereau have succeeded in producing the "soft sore" upon the cephalic region by inoculation.

upon which it is seated areolated, any variety of sore, boil, or pimple tends to induce surrounding hardness, particularly if such sore be chronic or subjected to irritant applications.

If ulceration involves the integument or the superficial and closer layers of areolated tissue, and the amount of new matter thrown out is great, this granulation-material, which at first is large, succulent, and composed of spheroidal cells, eventually, as the absorption of fluids and advancing organization cause contraction and condensation in the new products, leads to a certain degree of hardness at the periphery of the sore.

Indolent sores also show a tendency to hardness; *e. g.* cracks about the tongue, sores upon the buccal membrane, ulcers over the tibia, fistulæ leading to sequestra, &c.

Irritation, implying an increased and morbid nutrition, proverbially induces hardness, as any one may prove by the application of caustic to any venereal sore.

As Mr. Henry Lee has well remarked upon the sore which involves the areolar tissue (phlegmonoid suppurating sore)—“From the amount of effusion, in order to limit an inflammatory action, the sore is here surrounded by much induration, which, however, does not terminate abruptly, unless upon the confines of a neighbouring tissue structurally different.”

There is also a greater tendency to suppuration in sores affecting loose glandular, than dense parenchymatous tissues. How frequently an ulcer upon the glans penis discharges pus, and copiously, compared with one upon the prepuce!

CASE 1.—Gr. C—, seven days after connexion, got a sore. He went to hospital upon the following morning, and the ulcer was cauterized with nitrate of silver. For the last fifteen days he has only applied water-dressing and black wash. Upon the upper surface of the prepuce there is an oval, superficial, indolent-looking ulcer, which extends upon the glans. This ulcer may be divided into two parts by the different tissues involved; two thirds of

it being upon the prepuce, indurated, and discharging sparingly; one third upon the glans, soft, and suppurating freely. The line of demarcation between the two is accurately defined by the cessation of the hardness at the corona. After washing this sore carefully, a piece of lint was applied, and retained *in situ* by the prepuce being drawn over the glans. The following morning the lint was removed. Viewed by transmitted light, two parts were tolerably accurately defined. The larger portion was moist; the smaller, corresponding to the soft part of the chancre, was yellowish and creamy. By needles the lint was torn, and the fluids from the different parts transferred to slides. Examined with the quarter-inch glass, with and without acetic acid, the yellow part gave a field of numerous pus-globules. The transparent, moist part gave globules (with epithelium), far fewer in number, and having all the appearance of pus-globules; although, to be guilty of a great refinement, the nuclear particles were less marked after acetic acid, and the cell-wall less distinct, than in the former.

Having premised thus much, as essential to the right appreciation of what follows, I propose to treat of—

I. The varieties of infecting sore.

II. The results of auto-inoculation.

III. The occurrence of syphilitic infection after suppurating bubo.

IV. The occurrence of constitutional symptoms following an urethral discharge clinically identical with gonorrhœa.

V. The bubon d'emplée.

VI. The periods of incubation preceding the appearance of the two kinds of venereal sores, and the absence of any proof that we can guarantee against constitutional infection by any abortive treatment applied to the primary syphilitic lesion.

I. Excluding the typical Hunterian chancre, and ulcer possessing the specific induration, we find that superficial

erosions, involving but a part of the integument or mucous membrane, and leaving scarcely any induration about the cicatrix, are the frequent precursors of general syphilitic infection.

The observations of Bassereau, Sigmund, and Vidal show this.

Bassereau's table of 170 cases of syphilitic erythema.

After superficial erosions	146 times.
Circumscribed ulcers, with abrupt edges, involving the whole thickness of skin or mucous membrane	14 „
Phagedænic sores	10 „
	<hr/>
	170 „

Such superficial erosions are chronic in their nature, indolent in their action, and so trifling in extent as often to escape the detection of the individual. Upon the glans penis an infecting sore may appear as a localized "rawness," or as a mere dull discoloration, with shedding of the epithelium, and without the slightest trace of induration.

Seated upon the prepuce, these erosions will frequently induce an indurated state of the preputial tissue and phimosis. That the date at which such induration appears varies very much I am pretty positive, although the limits within which it may do so are difficult to determine. Ricord states that induration appears most frequently during the first or second week *after contagion*; never before the third day, or after the third week. From this it would follow that, if a chancre is to be indurated, it will be so by the twenty-first day after the date of contagion. I have lately, in two cases, seen induration appear at the base of a sore upwards of one month after the commencement of such sore. This late appearance of induration is not uncommon, judging from my own observation. Upon the other hand, no chancre has shown the characteristic induration earlier than three days from the appearance of the sore.

Ulceration, as generally understood, may scarcely affect such sores at all.

When the induration proper to the specific morbid process is situated in the hardness belonging to the seat of the sore, whether arising from the physiological properties of the affected tissues or induced by irritation, we may have an infecting sore most difficult of diagnosis: when, moreover, the subject of this disease has a hybrid affection, *e.g.* sores of different characters upon the same spot, we may have a pus-producing and infecting sore, capable of auto-inoculation, and attended with suppurating bubo.

CASE 2.—In 1854, a respectable-looking man presented himself at the Newcastle Dispensary, with an indurated sore upon the fossa glandis and symmetrical enlargement of the inguinal glands. He was indignant at the diagnosis formed, stating that he was married, and was positive that he had had no intercourse with any one but his wife. He directed me to visit his wife, which I did; and I found upon the inner aspect of the left labium a slight excoriation, without the least trace of hardness, and without appreciable discharge. The woman was ignorant of the presence of any disease, and I hesitated as to its nature.

She subsequently had secondary syphilis, and about six weeks afterwards her husband became similarly affected.

CASE 3.—Lieut. —, sixteen days after connexion, noticed a very trifling circumscribed redness upon the prepuce. He was not aware how long it might have existed. It looked slightly more vascular than natural, and the epithelium had an appearance of dulness, compared with that of the neighbourhood. Four days afterwards it became raised into a small prominence, not unlike that produced by the sting of an insect, or a miniature spot of erythema nodosum, without, however, any discharge or apparent loss of substance. One day, after having dusted the part with some powder and taken hard exercise, he noticed that there was a trifling discharge, and some exudation of epithelium took place, rendering the diseased spot moister than usual. At a later date, numerous very

minute depressions appeared upon the surface, evidently from molecular disintegration, and this was the only symptom of ulceration at all. A prominence remained at the seat of the disease. He had enlarged inguinal glands, and subsequently suffered from psoriasis palmaris.

CASE 4.—Gr. McK—, æt. 24, four days after connexion, had three superficial sores (soft) upon the surface of the glans, with balanitis. These all healed by local treatment.

Eighteen days after connexion, and as he was about to be discharged from hospital, a sore appeared upon the prepuce, which became a regular Hunterian chancre, and from which inoculation proved unsuccessful.

CASE 5.—Gr. S—, æt. 22 (a recruit). First attack. Date of contagion uncertain. Sores appeared upon the 12th of December. Admitted on the 15th, with two soft sores on the fossa glandis, discharging pus, from which he was inoculated successfully on the 17th, and reinoculated successfully on the 19th with virus obtained from the artificial sore; both of which were then destroyed by caustic. Local astringent applications to the sores on the penis. There was no bubo.

Upon January 1st, the chancres on the penis had become indurated, and healed with an indurated cicatrix. The results of the artificial inoculations healed quickly, without induration. Constitutional syphilis subsequently appeared, as a roseolo-squamous exanthem.

CASE 6.—Gr. —, æt. 28. First attack. Contracted his disease while upon furlough. When admitted, he had three soft chancres upon the prepuce, all discharging pus; a suppurating bubo in the right groin; in the left groin a large, inflamed gland, as big as an apple. He stated that the sores followed three days after connexion, and that the disease had existed five days. Inoculation from the sores, as well as from the bubo, succeeded. Nitrate of silver was applied, and in eight days the sores all healed. Upon the sixteenth day

after the appearance of disease, below the surface of a healed sore, an induration came on, situated quite beneath the epithelium, and without any erosion. It was well defined, very hard, and typical in character, feeling like a "split pea" set in the skin. Slight excoriation took place over its surface three days afterwards. He was treated by mercurial vapour-bath and bichloride of mercury.

It occasionally, though rarely, happens that an infecting sore is preceded by a pustule, and a pustule is produced as the reaction following auto-inoculation.

CASE 7.—Gr. B—, æt. 26. Admitted September 23rd. Stated that the disease followed a connexion on the 18th. (?) (Soldiers' statements upon this head are not to be depended on, as they are liable to punishment if the disease under which they suffer has been concealed; hence they will name a very recent date.)

On his admission there was a pustule upon the prepuce, seated on an inflamed base. Some pus was inoculated in the skin of the thigh, and the original pustule destroyed by potassa fusa. Upon the fifth day a pustule resulted from that inoculation, from which, again, another pustule was produced by inoculation. Both these were destroyed by caustic at this stage. When the slough separated from the prepuce, an induration was found at the seat of the original sore, which proved indolent in character. Soft ulcers, without induration, appeared at the seat of the artificial sores. The inguinal glands were symmetrically affected. He was not treated with mercury at first. About the middle of December following, he was suffering from a syphilide (squamous), with ulcerated throat.

CASE 8.—*Chancre on face*.—Corporal P— presented himself at the hospital with a small ulcer upon the upper lip, close to and encroaching upon the left ala nasi. After a few days it became so unmistakeably like a Hunterian chancre that I took the man aside and told him my sus-

picious. I then learnt that about three weeks before, he went with a prostitute ; but as he was suspicious of her being diseased, he abstained from connexion. At that time he was suffering from catarrh, and had a few blisters upon the upper lip (herpes labialis ?). Could he have inoculated one of these ? Explaining to him the probability of such having been the case, and as he wished its nature proved, I inoculated the skin of one thigh with some fluid from the ulcer. Knowing that chancres upon the face were always hard, I thought I might determine by inoculation whether it were really of the non-infecting species, modified by the tissues in which it was situated. No result, however, followed such inoculation. He was treated with mercury, and the sore healed in a month, not without the occurrence of slight swelling of the corresponding submaxillary gland. I ought to mention that he had suffered from venereal affections before, but had never had any secondaries. He has since been treated for acne indurata of the nose, nocturnal pains, alopecia, and post-cervical engorgement. These symptoms proved very intractable, but yielded ultimately to mercury, and he is now well.

Of primary syphilis in women I know but little. The relative rarity with which the typical indurated sore is found upon the female generative organs has, however, been frequently remarked, though never explained. The syphilitic virus, falling upon the mucous membrane covering the vascular and loose glandular tissues of the vulva, seems to give rise to a product identical with what is observed upon the glans penis of the male, and, equally with it, to be often deficient in any peripheral induration.

The case of Lieut. — is given, not because it is unique, but because it was so carefully observed.

The other cases are capable of receiving one of two explanations.—1st. That they were instances of double infection. 2nd. That the inoculation of pus from an indurated and irritated sore gave rise to a pus-producing erosion, which, in time, became affected with the specific hardness.

Mr. Henry Lee has shown that the infecting chancre is not capable of auto-inoculation, unless it first be made to yield pus; and when we come to the subject of inoculation, I shall have occasion to remark upon the occasional production of an abortive form of pustule from the inoculation of other than specific pus.

It seems not at all improbable that the contact of a purulent fluid with an excoriation, during coitus, may give rise to a localized inflammation and suppuration. Case 4 appears to have been one of inflamed excoriations upon the glans, appearing early, with the subsequent evolution of an infecting sore upon the prepuce.

Case 5 was either the result of a hybrid affection, or that of a true syphilitic pus.

Case 6 was probably a hybrid affection, or double infection, upon the same spot.

Case 7 is peculiarly interesting, because the pustule was unbroken, yielding a fluid capable of inoculation; and the artificial disease was exactly such as results from the inoculation with syphilitic pus. It had an inflamed, quasi-firm base, resembling a papule.

Sores upon the integument of the sheath of the penis are commonly infecting, whatever be their appearance and character.

Secondary infection has been observed after—1st. The most superficial indolent erosion, without appreciable induration (or with this symptom of such slight degree and duration as to have escaped detection), and with little or no suppuration. 2nd. The same, with a well-defined, strictly limited, and very narrow rim of induration. 3rd. Sores, appearing as boils or spots of ecthyma, sometimes covered with a scab, discharging pus, indolent, with raised and prominent edges, honey-combed base, and large but ill-defined hardness. (I have purposely excluded that form of sore which appears as a well-defined, flattened induration, not unlike a mucous tubercle, because such is a Hunterian chancre, and I desire to avoid model cases.)

When these sores heal, they may leave little, if any, in-

duration; but a peculiarly dull, reddish brown discoloration appears at the seat of the cicatrix, which, after a time, becomes whiter in tint than the surrounding skin, and hence contrasts with it. Faint and minute radiated lines and depressions generally remain also, marking a stellate form of cicatrix.

As the situation of these sores exposes them to the irritation of the clothing, &c., they oftener inflame and suppurate than any other variety of infecting sore, and hence, I presume, it arises that their fluid is more frequently inoculable than that obtained from the indurated chancre elsewhere. At a time coinciding with the discontinuance of the police regulations affecting prostitutes in Malta, this class of sore became very frequent. From the very limited area, the small number of women in that garrison, the almost entire immunity of the troops from syphilis as a disease prior to that period, and the gregarious nature of soldiers' habits, it is probable that all were contracted from two or three sources, possibly one. The men's own statements left but little doubt also upon this head. From notes of six cases which I preserved I find that five were followed by secondaries within four months, and I heard of cases in other corps, in which the same thing was observed. These sores partook of the characters of one or other of the forms above specified. One could hardly apply the term, indurated, to any of them. An enlarged lymphatic appeared upon the dorsum of the penis in most, and in two an abscess formed at the root of the organ. The surgeon of the brigade, remarking upon the frequency and rapidity of constitutional infection, said to me that this variety of sore appeared the most certainly infecting; and yet, he added, they appear soft sores (?). We have since (1861) inoculated in a few instances from these sores, and with success in most cases. It is curious to note how frequently soldiers suffering from syphilitic infection have pointed out this part as having been the seat of chancre.

II. Inoculation, as ordinarily pursued, is not positive proof of the "specificity" of pus; *i. e.* assuming that the resulting

pustule be destroyed so soon as it appears, as is usually done. Opinions have of late been much altering upon this subject of "specificity" of inflammations. Van Roosbroeck's experiments go to prove that an ophthalmia may result from the inoculation of any pus, and that the true morbid property of that fluid depends upon the cells; for when it has been deprived of these by filtration, the remaining liquor appears innocuous. Simon, in his essay upon 'Inflammation,' (Holmes' 'System of Surgery,' vol. i), remarks—"There is ample room to question the popular impression that only specific inflammations are communicable, and much reason for suspecting it, on the contrary, to be a generic and essential property of inflammation, that its actions (or some of them) are always, in their kind, to some extent, contagious." Simon quotes from Dr. Gullie's and Sir Patrick McGregor's experience upon the occasionally contagious properties of infantile and common catarrhal ophthalmia, and cites Dr. Piringer's experiments, to the effect, that he had succeeded eighty-seven times in exciting conjunctival inflammation by the contact of an inflammatory product (pus), taken from sources the most various. That one rarely, if ever, fails with pus from a soft chancre to produce a soft ulcer, specific in character, duration, and course, is true enough, while pus from other sources often fails; and, when it succeeds, it only induces a bastard reaction. A pustule may be so produced, but the ulcer very quickly heals.

CASE 9.—Br. —, a man of strumo-lymphatic aspect, was treated for gonorrhœa in the summer of 1861; sympathetic bubo followed, which suppurated. Some pus was taken from a chronic sinus, which had existed nearly five months, and the right thigh was inoculated. Upon the third day a pustule appeared, which, upon the fourth, became prominent and surrounded by an inflamed areola. At this time it was shown to a surgeon, purposely kept in ignorance of the history of its production, and he expressed no doubt about its nature. Left to itself, it healed in a few (three) days.

CASE 10.—Gr. F—, æt. 23, admitted January 16th. Upon

3rd of December he was drunk, and had connexion. At the same time he sustained a fall and a slight abrasion of the left cheek ; in the neighbourhood of the abrasion two pimples appeared. On admission he had three soft, suppurating sores upon the glans, and one upon the prepuce, which was inflamed. One of the pimples upon the face was covered with a scab. By fomentation the scab was removed, and a very superficial ulcer appeared, which certainly looked the counterpart of one of the sores upon the penis. I inoculated the skin of the left thigh (with two different lancets, of course) with pus from the sore on the face, and from that on the penis. The result was a pustule in either case upon the third day ; a scab formed, which on the sixth day was removed from each inoculated sore. There was a punched-out, honey-combed ulcer beneath that resulting from the pus obtained from the penis, while the integument had all but healed in that produced by pus from the facial sore. No suppurating bubo followed in the groin, but the integument over the submaxillary region corresponding to the affected cheek suppurated. This could hardly have been a soft chancre upon the face (which I thought at one time). Considering that Ricord, in twenty-five years' experience, has never seen one, it would have been improbable that I should have done so ; yet had I taken the result of inoculation at the third day, I might have been deceived.

En passant, I must remark how much what has been written above bears upon the views held by Mr. H. Lee, that the purulent, soft, non-infecting sore is inoculable to any extent ; the plastic, infecting one, only when suppuration exists.

That there is not much difficulty in producing a soft sore from the *pus* of a hard one, and occasionally, though rarely, that an infecting sore is auto-inoculable at a very early period, are the impressions I have received from the result of inoculation in my hands.

III. It would be easy to be diffuse in illustration of con-

stitutional infection having been preceded by a suppurating bubo.

Acknowledging the intimate connexion of this with the morbid process induced by the soft sore ('chancre mou' of Ricord), and that a suppurating bubo forms no necessary part at all in the history of true syphilis, I am nevertheless certain that in army practice the exceptions to the rule are not at all uncommon.

The causes of such suppuration may be referred to one of three heads:—1st. Conditions of constitution, *e. g.* strumous and lymphatic subjects. 2nd. Accidental causes of irritation; and in the case of soldiers we have not far to go to seek these. 3rd. Exposure to multiple sources of infection, by which sores of different kinds may coexist upon the same subject.¹

My impression is that, if the infecting sore be made to inflame and suppurate by causes of irritation, combined with dirty habits, a pus inoculation may sometimes affect the lymphatics in addition to the syphilitic one. The following cases were extracted from the records of an ordinary regiment for the past year.

¹ A certain amount of suppuration may appear in a syphilitic bubo at a later date, and be coincident with the accession of secondary symptoms, as Mr. H. Lee has pointed out, and as is illustrated in a case at a subsequent part of this paper.

Table of Cases.

Number.	Name.	Age.	Date of last connection.	Date of admission.	Seat of sores.	Character of sores.	Treatment.	Bubo.	Date of re-admission.	Character of constitutional symptoms.	Previous attacks.
1	B—	19	Sept. 1 ?	Sept. 7	Fossa glandis and corona	Irregular shape, slight discharge, firm	No mercury	Multiple and symmetrical, one suppurating profusely	Nov. 20 Dec. 30	Ulcer of tonsils; rheumatic pains Anæmia; cachexia; nocturnal pains. Cured by iodides of mercury and potassium	None.
2	M—	20	April ? (during a drunken debauch)	April 10	Prepuce	Phagedænic	Nitric acid. No mercury	Ditto	June to October	Ecthyma; suppurating cervical glands; afterwards ulcer of leg and nodes on tibia (Sept.). Mercury and Ol. Jecoris	None.
3	D—	20	?	June 7	Prepuce	Erosions superficial, with surrounding induration	Cautics. Mercury	Two suppurating buboes	Sept. 10 Nov. 20	Anæmia and rheumatic pains Pastular syphilide. Cured by mercury	None.
4	T—	19	?	Feb. 14	Prepuce	Two sores; erosions; quasi induration	Cautics. No mercury	Ditto (66 days in hospital, open groins)	Dec. 10 Dec. 16	Ulcerated tonsils; iritis (right eye) Scaly syphilide on trunk. Mercury	None.
5	S— ¹	24	?	Sept. 11	Fossa glandis and corona, with preputial reflexion	Gonorrhœa. Sore in fossa hard; on corona suppurating; on prepuce very superficial	Cautics. No mercury till induration appeared	Suppurating bubo, left groin; indurated glands, right side	Dec. 20	Ulcerated tonsils; scaly syphilide. Mercury and iron	A chancre 3 years before. A gonorrhœa 18 months before

¹ The sores upon the prepuce healed quickly (eleven days). He was discharged, and readmitted three days afterwards with sores on corona and fossa glandis. Had been drunk the whole time. These last sores became indurated.

Buboes, in connexion with infecting sores, may appear under three forms.

First, the most surely infecting; the model form of a simple and unmixed case. A symmetrical and very early, but passive, enlargement and induration of multiple inguinal glands, showing no tendency to inflame or suppurate.

Secondly, with the above, the addition of a suppurating bubo, the tissues forming the periphery of which tend to take on chronic inflammation, leading to indolence and induration.

Thirdly, in lymphatic subjects, a gland upon one side, or one such upon either side, may enlarge to a great size, inflame very slowly, and long remain a tumour, with an œdematous, boggy state of the superimposed tissues.

As has been well observed, the morbid process in the groin is but a repetition of what had existed upon the penis.

IV. Of cases of constitutional syphilitic infection following an urethral discharge, so simulating gonorrhœa as to appear clinically identical with that disease.

CASES 11 and 12.—Autumn, 1860.—Two men were admitted into hospital with gonorrhœa (?), Br. A—, and Gr. S—. At the time of this occurrence we had the power to report any case of venereal, and upon the woman being pointed out by the affected individual to the police, she was handed over for inspection and treatment. The men came to hospital within forty-eight hours of each other, and were placed in contiguous beds. Gr. S— went with the police, and pointed out the source of his contagion. Br. A— went upon the same errand to the same house, and found the woman already removed. Gr. S— told me that, to their mutual surprise, they discovered that it was the same woman in each case. Both suffered from all the symptoms of gonorrhœa, and there was no suspicion to the contrary. Br. A— had suffered from syphilis before, Gr. S— never. (This statement is made from their own words, and after a minute examination of their persons.) After remaining in hospital

a long time, Br. A— was discharged cured, and no further symptoms, so far as I could trace, appeared in his case. Gr. S—'s recovery was delayed from gleet and irritable bladder, for which instruments (Nos. 10 and 12) were used. They passed without difficulty, local tenderness, or hæmorrhage. After appearing anæmic and in ill-health, Gr. S— had sore throat (ulcerated tonsils) and a guttural voice; subsequently papules appeared on the inside of the lips and the buccal membrane, coincidently with psoriasis palmaris and "nocturnal rheumatism." The inguinal glands were slightly enlarged symmetrically. For these symptoms he took iodides of mercury and potassium, with mercurial vapour bath, by which means, after many relapses, he was cured. The case was shown to some surgeons, who, of course, suggested a concealed chancre ('chancre larvé' of Ricord). I passed sounds, and tried to discover a localized induration, without avail. If anything, perhaps the canal was firmer and more swollen to the touch than usual. Some urethral discharge was inoculated in the skin of thigh (at the time it was gleety and apparently prostatic secretion), without any effect.

The woman in this case, I learnt from the civil surgeon, had a vaginal discharge, but no primary ulcer that he could find. She was, however, suffering from acne of the face and a cutaneous syphilide.

CASE 13.—Captain —, in his own words, "I believe that you doctors know very little, after all, of venereal. Here am I, never had an ulcer in my life; suffered, certainly, from gonorrhœa (at least the doctors had no doubt on that head); yet I had secondaries afterwards. Then you doctors said, 'Oh! a concealed chancre;' but the biggest sound would pass, and I have never had stricture."

CASE 14.—Gr. C—, five or six days after connexion, had urethral discharge, and was admitted as suffering under "gonorrhœa" by another medical officer. After the use of

nitrate of silver injections and salines, as abortive treatment, he rapidly improved, but a slight gleet remained, for which the penis was blistered. This urethral discharge afterwards augmented in amount, and became most copious and purulent, and symptoms of cystitis set in. After having been in hospital eight weeks he came under my care. Upon the dorsum of the penis were two large, oval, indolent, indurated, raised lumps. To me they appeared chancres. The glands of both inguinal regions were passively enlarged. In answer to my questions, and without any suggestion whatever on my part as to their nature, he said, "One has existed about forty-five, and the other about forty-six days, as near as I can tell. They gradually became and remained as you now see them, and they came, I think, from the discharge getting in contact with two sore places from which the skin had been removed after blistering." In seventeen days both healed under the influence of mercury. I learn that a papular syphilide has since appeared upon the trunk. By a later report it appears that this man has again passed under treatment for marked anæmia, and ecchymatous sores upon the extremities.

CASE 15.—1860.—Gr. R— was admitted with gonorrhœa (?). He remained in hospital an unusually long period, from having suffered from gleet and irritable bladder, without stricture, followed by a peculiar form of paralysis of the left lower extremity, which was supposed to be an illustration of the "reflex paralysis" described by Brown-Séquard. Continuing very anæmic, he was sent to a sanitarium for a time, without any benefit; and, pending a medical board, he was discharged from hospital, and put upon "convalescent duty." No suspicion whatever existed as to his having suffered from anything more than an ordinary, though protracted, attack of gonorrhœa, with some of the usual sequelæ. As the symptoms of local paralysis excited much interest, he was more than commonly watched. It was discovered, however, by accident, that some ecchymatous and rupial-looking sores had appeared upon the extremities.

Since that period he has suffered from a mixed cutaneous syphilide, papules upon the lips, copper-coloured stains, and indolent glandular swellings, with rheumatism and marked cachexia, for all which symptoms he has received the greatest benefit (cure?) from mercurial vapour baths, with iodides of potass and iron. In 1854, before enlistment, he had a venereal sore upon the penis.

CASE 16.—A gunner caught a gonorrhœa in Gibraltar, in 1860. It proved very chronic indeed, and passed into gleet; the inguinal glands enlarged symmetrically, and one suppurated. Urethral chancre was suspected, and mercury was given him. He slowly recovered from his urethral discharge, was invalided to England, remained in Woolwich Hospital for some time, and in September, 1861, joined his brigade. Marked cachexia: numerous indurated glands in either groin, some of which inflamed, but did not suppurate. After he had remained free from any urethral discharge for six or eight months, it returned, copious in amount, and remained for six or seven days. At the same time he had sore throat (but no ulcer), nocturnal pains and lichen of the trunk, with engorgement of the post-cervical glands. No. 12 catheter passed easily, and no local sore or induration was detected.

CASES 17 and 18.—Grs. H— and R—, in January, 1859, had connexion with the same woman: both suffered from urethral discharge (simulating gonorrhœa) and chancre, as the products. Gr. R—. — Date of appearance of the disease uncertain, but he is positive that seven days elapsed before any symptom appeared. At first he had an erosion upon the inner aspect of the prepuce, which was “burnt with caustic.” It became a regular Hunterian chancre, for which he remained in hospital seventy-five days. One gland in the groin suppurated. Three days after the appearance of the sore, he got urethral discharge, which continued for a month. Treated with mercury. Syphilitic rheumatism followed three months afterwards, since which time he has never

felt well. A slight scaly eruption appeared upon the arms at one time, which went away, and he had sore throat, which also passed off without treatment. Now (January, 1862), he is very anæmic, the glands in either groin are enlarged, and he complains of a pain, having nocturnal exacerbations, extending from the epigastrium round the left lower ribs to the left shoulder. His conjunctivæ are slightly yellow. This pain has lasted for months, and been variously treated. It was supposed to be due to dyspepsia. "In fact, sir, since that venereal I have never been the same man." He is at present being treated with iodides of iron and potash, and a mercurial vapour bath twice a week, with much improvement. Since cured.

CASE 19.—Acting Bombardier —, returned from furlough. He has been in his present state seven days. At the lips of the urethra, and seen upon forcible separation of them, is a sore, non-ulcerating, raised and prominent, quasi-indurated, extending about three quarters of an inch down the tube. Upon the inner surface of the prepuce is a similar sore, discharging pus and ulcerated. Upon the integument over the pubis is a large sloughy sore, with inflamed periphery, like a boil. The inguinal glands are symmetrically affected; one is inflamed, and threatens suppuration. Upon wiping the urethral chancre free of discharge and pressing the canal, on a plane posterior to the induration, purulent fluid exudes. This man has since had secondaries.

The question of the existence of urethral chancre may be considered settled. Ricord has a plate of one such, affecting the whole course of the canal. Ricord, however, would explain every case of gonorrhœa followed by constitutional syphilis as depending upon a concealed chancre (*chancre larvé*). This statement rests upon the foundation, that chancre has been over and over again demonstrated within the urethra, and that the discharge has been found capable of inoculation.

Excepting the last, I have excluded cases of chancre

affecting the meatus, and visible within the canal by forcible separation of its lips ; and in the preceding cases it is to be understood that the usual symptoms said to be diagnostic of concealed chancre, such as local induration, local pain or obstruction in the passage of instruments, protracted incubation between the exposure to contagion and the appearance of urethral discharge, rusty colour, gleet character, and the presence of detritus in such discharge, have been absent.

As a reviewer in the 'British and Foreign Med.-Chirurgical Review' has justly remarked, the experimental inoculation of urethral discharge by Hunter has never been thoroughly explained. Hunter, as an observer, occupies the very first rank among scientific inquirers, and there can be no doubt as to the facts recorded by him. The application and bearing of Case 14, that of Gr. C—, upon this is obvious. The prevalent doctrine (owing to the demonstration of urethral chancre by Ricord) is that, when secondary infection follows urethral discharge, it *necessarily* implies the pre-existence of an ulcer in the urethra.

One can understand how it is that in gonorrhœa an inflammation commencing near the meatus, at the seat of application of the irritant, spreads by contiguity and continuity of tissue ; but how the syphilitic virus should enter and pass down a canal like the urethra, at a time coincident with an excretive act, and with the cavity (a potential one really) effaced by the physiological organism, and should become localized at a remote point, where no abrasion has existed, is very difficult of explanation.

The behaviour also of an infecting chancre within the urethra contrasts remarkably with that seated upon the exterior, in the nature and amount of the discharge. The first furnishes us with a copious, purulent excretion, the latter with a scanty, quasi-purulent or non-purulent discharge. I was unable to trace the constitutional contamination in the above cases to chancres about the mouth and face, which M. Rollet conceives to be a frequent source of the syphilitic infection.

In a translation of 'A Treatise upon Syphilitic Diseases,' by F. Swediaur, M.D., 1821, I find the following interesting remarks :—" In a word, they have maintained that there is no syphilitic or venereal gonorrhœa, properly so called, and that consequently the existence of a syphilitic blennorrhagia was only founded in theory.

"I answer to this that, though it is not very common to see blennorrhagias produce a general infection, it is not, however, very rare, especially in great towns, to see blennorrhagias followed by those symptoms."¹

After remarking upon having seen examples of the appearance of syphilitic symptoms in consequence of a blennorrhagia, without the least appearance of chancres, and his having treated women who have had, in consequence of blennorrhagias, syphilitic symptoms, without ever having had chancres, he says that all blennorrhagias, attended with ulcers in the canal of the urethra, are often followed by symptoms of syphilis.

He enters into an elaborate theory to prove that symptoms of infection do not more frequently follow from blennorrhagias, because the syphilitic virus, applied to the urethra, excites an inflammation in it, seldom causing ulcers, the inner membrane of the canal being defended by the great quantity of mucus excited by the irritation, and this mucus diluting and carrying away the poison, as well as protecting the sides of the canal. He relates his own case to prove that if an erosion is caused by violent catheterism, an ulcer ensues, through which absorption may take place, and the system may be infected. The rarity of ulcers in the vagina of women he explains by the protection afforded by the mucus. "I know many cases where patients affected with a blennorrhagia, without any ulcer, communicated chancres, and reciprocally."

¹ Some of these cases of constitutional infection have doubtless been in reality gonorrhœal rheumatism, with an affection of the eyes (inflammation of the cornea and anterior layer of the iris). When some cutaneous disease has also appeared, these cases were and are easily mistaken. *Vide* 'Researches' of Rollet.

Again, in another part, " Sometimes in foul coition the virus is absorbed by the lymphatic vessels, and directly causes buboes ; at other times it seems to pass immediately into the body, and then produces syphilitic affections, without producing any sensible effect in the parts to which it was first applied, and that without leaving the smallest trace upon the surface of the body."

I am aware that this pathology is very weak in the present day, and that much of it has been proved to be erroneous ; but his suggestions as to the protective power of mucus are not entirely unsupported by facts, inasmuch as we now know that it is probably due to the presence of mucus in the stomach that its coats are protected from the solvent action of the gastric juice.

The explication and appreciation of primary syphilitic, intra-urethral disease, will be much facilitated by the following considerations.

A diffused induration of the prepuce, with balanitis, and connected with the most superficial erosions of its inner surface, as well as the most trifling erosion, without any induration, upon the glans penis, may each be the precursor of syphilitic infection.

The chancre virus appears, ordinarily at least, innocuous, if applied to integument or mucous membrane free of any abrasion.

The frequency of abrasions upon the penis, the result of various causes (such as coitus), and the frequency with which a chancre is limited to their seat, when such abrasions exist.

The contagious properties of the fluids obtained from a secondary lesion, and probably even of the blood of a person constitutionally syphilitic.

The uterine lesions furnishing leucorrhœal discharges, so commonly present in females constitutionally syphilitic.

The peculiar texture of the urethral tunics, and the modifying influences which the physiological functions of the organ must exert upon any disease affecting its mucous membrane, in its twofold aspect, the sexual and urinary ;

the latter of which exclusively affects the urethra: the absence also of any abrasion, as a rule, of its lining membrane.

Lastly, some modern authors, perceiving the great difficulties attending an accurate description of the forms and appearances of a primary syphilitic lesion, have defined it simply as that lesion, initial to constitutional syphilis, which is induced by the action of the virus upon the part to which it is applied.

Bearing these considerations in mind, there would seem to be tangible grounds for the theory that, upon the one hand, a syphilitic virus, *per se*, may lodge in one of the lacunæ near the meatus, and give rise to inflammation, at first localized, then diffused, and attended with a transudation of morbid products, which may be excreted through the urethra, as well as deposited in and beneath its lining membrane, without any necessary ulceration; and, upon the other hand, that a gonorrhœal or leucorrhœal discharge may have syphilitic properties engrafted upon it, by virtue of its being obtained from the subject of a constitutional syphilitic taint, and so, that a syphilitic virus may run its course as a part and parcel of the gonorrhœal inflammation, with the exciting cause of which it is associated. Inoculation in such cases does not aid us much, as regards prognosis, or as to the use of mercury: if successful, it may be the result of either the soft, non-infecting, or the indurated, infecting sore, probably the former; if unsuccessful, it affords no direct proof against a syphilitic infection, for the indurated sore may not be followed by any reaction upon inoculation of its fluid products.

V. The "bubon d'emblée" is credited by M. Diday, who remarks upon the slow development of the tumour and its indolent character; adding that, when it suppurates, constitutional syphilis does not follow.

CASE 20.—An officer, eighteen months ago, had a bubo in the right groin, which appeared without any obvious cause. After a subacute course, it suppurated, and was incised.

Aware of the nature of bubo, and that his mode of life laid him open to a suspicion as to its source, he took medical advice, not, however, believing that the disease could be syphilitic. He was perfectly certain that he had not then, nor ever had before, even the slightest sore or abrasion upon the penis, or urethral discharge, or sores upon the lips, or, indeed, upon any part of his body. "At the time the bubo appeared, I was as white and clean as a white kid glove, and neither I nor the doctor could find any sore upon me." He was assured by the medical men that it was not of syphilitic origin. Subsequently other glands enlarged in both groins, and one on the left side suppurated. About three months after this he had a "crop of boils," which was supposed to be due to impoverished blood. He consulted more than one medical man with reference to these, but was told that they were not syphilitic. One day, by accident, I saw his person, and remarked upon the "secondaries" he must have had. Indignant at this, he told me the preceding history. I doubted at first, but as mucous papules appeared about the lips, and on the cervical regions, and the post-cervical glands were enlarged, I adhered to my opinion of their syphilitic origin. He is now recovering, under mercury, from onychia of one finger, and coppery stains on the body, with psoriasis. How far does this case go to support Hunter's doctrine of physiological absorption?

VI. The question of the incubationary period of syphilis, *i. e.* the interval between the reception of the virus and the local manifestations of its action, I propose to link together with the inquiry into the value of an abortive treatment, from the manifest bearing the one has upon the other.

CASE 21.—An officer, in 1857, came to me with an erosion upon the prepuce. He stated that it followed a suspicious connexion of twelve days before. He was certain that no sore appeared before that morning, as he had carefully examined himself daily in "tubbing." The inguinal glands were

not affected. Although I did not think it a specific sore, but rather an abrasion, I destroyed it with nitric acid, assuring him that he would be safe, if he had spoken the truth. After the separation of the slough, the base became indurated, and the inguinal glands also. That this officer suffered from secondaries I know to my cost. He was indignant when I hinted that he might have been deceived, or might have misled me as to the date of its appearance.

CASE 22.—A serjeant came one morning in 1860, and showed me a superficial abrasion on the glans, stating that after a certain connexion he had carefully inspected himself (often twice or thrice daily), and he was sure that he had noticed a redness for the first time upon the previous evening. Nitric acid was applied, but constitutional symptoms followed, although the sore healed quickly after separation of the slough, and formed a depressed circular cicatrix upon the glans.

CASE 23.—An officer, who was conversant with Ricord's views, and a thorough believer in abortive treatment, inasmuch as, he remarked, he had proved it upon his own person, noticed one day an abrasion upon the prepuce. This was ten days after the last connexion. He applied nitric acid within thirty-six hours of its first appearance, when it was no bigger than a "pin's point." Upon the following morning he again applied nitric acid. There was no induration of the sore, nor any enlargement of the inguinal glands at that time. He went upon leave. When he returned, he had an indurated, cup-shaped sore, still unhealed, with symmetrical enlargement of the inguinal glands. For these he took iodides and used mercurial vapour bath. Within two months he had an attack of jaundice and sore throat. In spite of the mercurial treatment for the primary sore, and afterwards for the icterus, syphilitic lepra appeared.

Not to be tedious in proving a point which has already been treated of by different observers, I must only remark that, if an infecting ulcer may appear after a long

period of incubation (which is said to be particularly the case with sores resulting from inoculation of the virus of a secondary lesion), it is scarcely probable that the chancre is a simple localized sore, but rather an expression of an infected state of the system, as well as a local product of the direct action of the virus upon the part to which it is applied. Collateral proof may be obtained, too, from the results of vaccination, of which I will give two cases. A soldier, after being vaccinated, was observed to apply his mouth to the part and suck it. The medical officer, desirous of seeing what effect this would have, said nothing. A regular vaccine pustule followed. An infant was vaccinated from another, and eighteen hours afterwards the vaccinated spot was touched with nitric acid. Upon revaccinating this infant five days afterwards, only a slight and very modified reaction ensued. M. Bousquet has proved also that the vaccine pustule does not appear until the organism has been modified by the vaccine virus.

Excluding all statements made by soldiers as to the period of interval between their last connexion and the appearance of the sore, as useless, I shall confine myself to the statements of officers. My opinion was lately asked by a brother medical officer upon this case, for which he stated he could positively vouch.

CASE 24.—An officer went to town at a certain date, and was there exposed to contagion. One day, after taking exercise, he felt one of his groins enlarged, and at the same time he called attention to an ulcer upon the prepuce. He averred that he thought it could not be syphilis, because it began fifty-six days after his visit to London. He took a bath every morning, he said, and adhered to his statement, that it both appeared and was discovered fifty-six days after connexion. It became indurated three or four days afterwards, and the inguinal glands were symmetrically affected.

CASE 25.—An officer, a man of the most thorough truthfulness, suffered from some erosions on the inner aspect of

the prepuce, which were followed by induration and balanitis. It was his first attack, and he had a timely horror of infection, and bathed, like all officers, daily. He stated, in positive terms, that the ulcers made their appearance certainly upwards of one month after the last exposure, adding that he was sure he could not have missed seeing them.

Rollet's twelve cases show that the period of incubation, following inoculation from secondary lesions, varied from nine to forty-two days, the mean being twenty-six days.

If a large number of patients be questioned as to the period of incubation, it will be found that the soft, suppurating variety of sore appears from three to eight days from the last connexion, while in the indurated, infecting variety the period is much longer. Some of the cases of long incubation may find their explanation in the fact, that there has been a prolonged contact of the virus with a healthy and unbroken surface.

Thus, Mr. Ceeley states that he has often succeeded in producing the vaccine pustule by keeping lymph in contact with the epidermis for a certain period of time, without abrasion of the cuticle.

Of course, if the individual be the subject of a double infection (*i. e.* the soft and non-infecting, with the indurated infecting sore), or if he be inoculated with a syphilitic pus, a hybrid affection may be the result of the first, or a purulent sore, followed by induration, of the second. Untrustworthy as statistics upon this point must be when taken from the statements of soldiers, the general result of my inquiries is corroborative of there being a widely different period of incubation in the two varieties of sore, and it is to this that I attribute the different effects from cauterization of venereal sores.¹

¹ It was my intention to have given a tabular view of my experience upon this head, but I regard any statistics gained from soldiers as worthless, because many connexions may have taken place within limited periods, and because the soldier, knowing he is liable to punishment for concealment of disease, invariably asserts a recent date.

In proof that the infecting chancre is generally preceded by a long period of incubation, I may adduce Diday, who found that, while the soft sore appeared in a few days, fourteen days was the mean date for the appearance of the infecting sore. M. Chaballier found an average interval of from fifteen to eighteen days. In Rollet's case of inoculation of virus from a hard chancre upon a patient having a soft sore and bubo, no reaction took place until the eighteenth day.

Is the abortive treatment a positive guarantee against constitutional infection? Ricord thought that, if a sore were destroyed before the fifth day of its appearance, constitutional symptoms did not follow. Mr. Acton limits this to the third day. As no objective symptom appears ordinarily before such dates, by which we can diagnose the true nature of the sore, we have obviously no guarantee whatever that its character was an infecting one.

Upon the other hand, we have Langston Parker's statement, that he has destroyed a chancre two hours after its appearance, and that constitutional symptoms followed. M. Diday might be quoted to a similar effect, viz.: the insufficiency of cauterization for this end, in some papers published by him in the '*Revue Thérapeutique Médico-Chirurgicale*,' and in the '*Gazette Médicale de Lyons*.' Mr. Henry Lee, moreover, has proved that, if the infecting chancre be cut out, the edges of the wound take on the specific morbid process.

Whilst believing that the doctrine of the abortive treatment of infecting chancre rests upon an insecure foundation and false analogy, I would not, of course, be understood to deny the utility of cauterizing agents.—First. Because a soft chancre is undoubtedly capable of being aborted by them; and at certain stages chancres, like any other ulcers, may become indolent, weak, unhealthy, or granulating redundantly and with inflammation, and the healing may be marvellously expedited by a discriminating use of caustics. Secondly. Because I do not consider it yet absolutely proved that there is no stage at which the disease and infection can be arrested, but only that the doctrines on this head hitherto promulgated have been far too dogmatical and exclusive.

Thirdly. That, practically speaking, my own experience leads me to infer that there is a connection between the severity and duration of the primaries and the degree to which the constitution is subsequently infected. I suspect, therefore, that although the primary disease is not by any means so purely local as has been imagined, yet the virus tends to reproduce itself and germinate therefrom as a centre of infection.

In the preceding pages, the writer has drawn from his own observations, and he cannot doubt that the difficulties which he has encountered have been met by others.

The opinions and doctrines of even the best observers in syphilitic disease have been of late unsettled. In all revolutions of opinion, as one part of the truth rises, another portion often sets. We are apt to exaggerate the influence and importance of new facts, to the disparagement and neglect of the older and more established. It is as well, then, to remember that in a large majority of cases, as seen in actual practice, the doctrines of Ricord remain intact, and, guided by their teaching, we can safely discriminate and diagnose.

In the more mixed, varied, and anomalous forms we can also generally draw trustworthy conclusions, if we have regard to the *whole* of the symptoms pertaining to the infecting sore. One or other of them may be absent, but not all.

The initial lesion in constitutional syphilis is a sore, indurated, as a rule, generally solitary, involving only a part of the thickness of the tissue upon which it is seated, with sloping, and not abrupt, perpendicular edges, indolent and chronic in its nature, yielding a scanty discharge, serous or epithelio-purulent rather than purulent, not auto-inoculable, following a longer period of incubation than the non-infecting sore, and attended with an induration of multiple glands, symmetrically placed, and without tendency upon their part to suppurate.

POSTSCRIPT to Sect. V, pages 433-4.

September 20th, 1862.

The following case is noteworthy in many respects, and not the least so in the following :—1st, in the primary affection being glandular disease, without any ulcer; 2ndly, in the peculiar affection of the teeth, which I have more than once noticed, and which I believe to be of syphilitic origin.

Gr. D. C—, æt. 28. Upon April 23rd, 1856, this man had connexion. Upon May 18th following he was admitted into hospital with a glandular swelling in each groin. He discovered afterwards that two soldiers had caught a venereal affection from the same woman. There were many glands affected in both groins, and one upon the left side inflamed and threatened suppuration, and was opened by caustic potash. Subsequently an abscess appeared in the right groin, and was similarly treated. No sore of any kind existed on the penis, nor was there any urethral discharge, or cicatrix, or mark on the penis. Six weeks afterwards he suffered from a red rash over the whole body, and the skin came off in scales. This exanthem was followed by the appearance of numerous pustules, and iritis of the right eye. For these symptoms he was treated by mercurials for a fortnight, but his mouth was not affected. He subsequently consumed large quantities of iodides in the Decoct. Sarsæ comp. At the end of two months he was discharged cured (?). About seven or ten days afterwards he was re-admitted with "rheumatism in all his bones," particularly the legs. The rheumatism prevented his sleeping at night. After about four months' further treatment he was discharged cured, but he has never enjoyed the health he had before these attacks.

In the beginning of 1858 his teeth began to decay in the most curious manner. A dark spot would first appear upon the front aspect of the enamel, close to the gum. The lateral incisors of the upper jaw were first affected, and disease of the remaining front teeth speedily followed. This discoloured spot became the seat of caries, and a minute circular hole resulted, situated in the middle line of the tooth, bordering upon the gum. The disease in each tooth gradually advanced from before backwards, extending laterally at the same time, and making its way in a very definite manner, until the line of caries passed through the tooth, and severed it at its junction with the fang. He has lost the upper teeth in this way. The two central incisors, however, are not quite destroyed; the disease in these has nearly severed the crown from the fang. The lower teeth have commenced to be affected in a similar manner. A line of caries has appeared upon the incisor and canine teeth, exactly at the junction of the crown and fang, and threatens their destruction.