Part First.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*Four and a Half Years' Experience in the Lock Wards of the Edinburgh Royal Infirmary.*[1] By A. G. MILLER, F.R.C.S.E., Surgeon to the Royal Infirmary, and Lecturer on Surgery at Surgeons' Hall, Edinburgh.

GENTLEMEN,—It is my intention to give you to-day, as an introduction to the course of lectures on systematic surgery, an account of my experience while in charge of the Lock wards of the Royal Infirmary during the last four and a half years. I have selected this as my subject for two reasons principally. First, because, having determined to record the results of my treatment, I have thought it right to give my class the benefit of what experience I have gathered; and, secondly, because, the number of lecture days being few enough in the session, I would like that not one of them should be given up to what is not legitimately within our special work. Of course, this lecture will be of a clinical character, but will not on that account be less useful to you.

I regret very much that, owing to an unfortunate circumstance, my statements must necessarily be founded on general impressions rather than on statistics. When the removal to the New Infirmary took place, my case-books were removed for me, and I have never seen them since. I understand that a number of the case-books were sold for waste paper, and fear that mine have suffered this horrible fate. In this way I am deprived of the histories of about the half of my patients. It is also unfortunate that, owing to a regulation of the Royal Infirmary, none but females are admitted to the Lock wards. On account of this my experience has been, as it were, rather one-sided.

Without further preliminary, I shall now draw your attention first to

Gonorrhœa.—This disease, in an acute or chronic form, was present in almost every patient who applied for admission, and

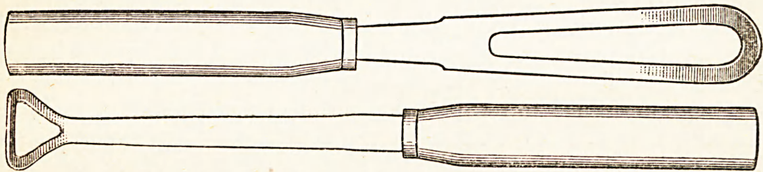
[1] Introductory lecture to the course of systematic surgery at Surgeons' Hall, Edinburgh, delivered 24th October 1882.

the discharge, my patients being all females, came only from the vagina (except in a very few cases)—being, therefore, a vaginitis, and not a urethritis, as in the male.

True acute gonorrhœa—that is to say, a thick, yellow, purulent discharge—was seldom seen, and never remained long. Those students who attended the demonstrations, which were weekly, were aware of this, for the discharge had become muco-purulent generally before the cases could be shown.

Many of the patients presenting themselves for treatment seemed to be unconscious of the presence of a discharge, though it might be considerable, and, in most, it caused little or no suffering. These latter sought advice for some other affection. Those who came on account of the gonorrhœa, or in whom that was the principal ailment, had an irritable condition of the ostium vaginæ which must have made sexual intercourse painful, and was most likely the cause of their applying for treatment. In them the introduction of the speculum was almost impossible.

I here show the kind of speculum employed by me for the last year or more. It was recommended to me by Dr Edward Henderson of Shanghai. It consists of two blades, as you see.



The two blades are employed, one in each hand, to separate the labia, so that the external parts may be examined without the surgeon requiring to touch them with his hands. Next, the narrower blade is passed into the vagina and pressed against the perineum. This opens the passage, in most cases, sufficiently to enable the operator to see and also demonstrate to others the condition of the mucous membrane. If it is necessary to examine the os uteri, the operator passes in the second blade along the upper wall of the vagina, and presses its end against the anterior wall of the cervix, when the os is tilted forwards and becomes distinctly visible. On withdrawing the instrument, the lower blade will have in its loop some of the vaginal contents, the character of which is thus discovered.

My treatment of vaginal discharges consisted, first, in attention to cleanliness. And here allow me to say that dirt, or at least want of cleanliness, is very frequently both a cause and an aggravation of disease in the class of women who came under my care. The utter absence of cleanliness, and the indifference to dirt, in most of the girls, has both surprised and disgusted me. They seemed never to wash themselves, and were quite ignorant of the value of injections. The explanation of this I consider to be the

extreme youth of the sufferers, their ages ranging from thirteen upwards, the average age for the two years for which I have the case-books being about eighteen.

The second item in the treatment was rest in bed, at least for the first few days.

Lastly, injections were employed, the substances most used being permanganate of potash (or Condy's fluid), sulphate of copper, sulphate of zinc, and tannic acid with glycerine. Latterly I have generally ordered first a pint or two of luke-warm water, with sufficient Condy's fluid to make it a bright purple, to be injected twice daily with Higginson's long tube. If the discharge was not greatly reduced in a few days, I then ordered a solution of sulphate of copper (x. gr. to the ℥j.), to be continued for a few days. This lotion, I found, could not be used for long, even when very weak, without causing an increase instead of a diminution of the discharge. I have preferred the two substances mentioned above for several reasons, one of which was, that as both stain the surface, I could tell at a glance whether they were being used regularly or not. When a discharge became considerably reduced, I then ordered plain cold water or very weak Condy's fluid injections. Carbolic acid I have used very little. What I saw of it did not encourage me to continue its use.

The period within which a gonorrhœa ceased was from five to twenty-one days.

Urethritis, as I have already said, seldom accompanied the very common vaginitis. When present it was never affected by the treatment of the latter, but persisted unabated. Yet the administration of cubebs and copaiba removed the affection in a few days. This interesting result of treatment I was able to demonstrate more than once at my clinique.

Urethritis in the female is, in my experience, a much milder affection than gonorrhœa in the male. The symptoms are less severe, there are fewer complications, the disease is more curable, and leaves no trouble behind.

Of *Gonorrhœal Rheumatism* I have seen very little, though almost every patient I had was affected with a vaginal discharge to a greater or less extent. I cannot say whether, in the few cases I saw, there was urethritis present. In one case, multiple articular inflammation with effusion accompanied a discharge which was not gonorrhœal at all, but was caused by the application of carbolic acid to a chancre on the cervix uteri.

Not unfrequently patients have complained of articular pains which have disappeared on the administration of iodide of potassium and warm applications.

Labial Abscesses were not uncommon in connexion with gonorrhœa. These I used to open; but observing that they frequently gathered again or formed sinuses, I latterly left them to open of

themselves, merely keeping the patients in bed and applying poultices. Cure was generally effected in a few days.

Buboes occurred occasionally, but not frequently, as the result of the irritation of gonorrhœa. These generally disappeared under rest and warm applications. I shall have more to say about buboes when referring to those the result of chancroidal irritation.

Gonorrhœal Warts were not uncommon. These growths I believe to be simple in their character, not connected with syphilis in any way, but due to moisture and warmth alone. No affection that I have had to treat has given me so much trouble or cheated me so often. I have tried all sorts of remedies, and every now and then thought that I had found a specific when a case became cured under some method; but on using the same remedy on the next case I have always had my hopes dashed. I used to think that special remedies might suit special cases or constitutions, but now I believe that no remedy (at least of those I have tried, and they have been too numerous to name) does more than keep the warts from increasing or enlarging. But a certain period arrives in their history when they cease to grow and gradually disappear. I believe that warts are peculiar to certain constitutions, and, as I have said, have a certain period during which they grow, and then of themselves they die down.

Those remedies which I found most useful in keeping down warts were, acetic acid and pyrogallic acid painted on, and calomel, or, best of all, the desiccated sulphate of iron, dusted on. As they depend on moisture and warmth for their existence, the best way to keep them down is to see that they are dry, and this is most thoroughly effected by the sulphate of iron powder. When the warts are pedunculated, they can be easily removed by ligature or scissors.

In a few cases, where the warts were large and massed together on the labia, I had to remove them by the thermo-cautery, along with the skin from which they grew. This always left an extensive ulcer and marked cicatrix. I have, therefore, always preferred the ligature where it could be applied. The ligature requires two or three operations instead of one; but the result is, in my opinion, much more satisfactory, as there is no ulceration or cicatrix left.

Of the *Sequelæ of Gonorrhœa* in the female I cannot say much. Ovarian and uterine affections, which had probably arisen from an extension of the vaginal inflammation, were observed, but not to the extent I would have expected from the almost universal condition of gonorrhœa or other vaginal discharge in the patients admitted. On the other hand, I have frequently been able to show to the students the os uteri with its plug of natural glairy mucus in cases of recent and of old-standing discharge.

Chancroids.— Perhaps I hardly need say that I am a believer in the so called dual theory of Bassereau and Ricord. That is to say, I believe with many eminent authorities that there are two distinct

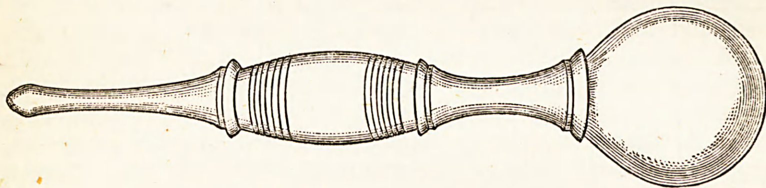
venereal sores, the one of which is purely local, while the other affects the constitution to a greater or less extent. I cannot at present enter into this important and interesting question. I shall merely say that I was taught by my father and by my predecessor in this place, Dr Watson, to believe in the dual theory, and my experience in the Lock Hospital has confirmed me in that belief. I do not say it is always easy to tell a non-infecting from an infecting sore, or that the characters of each are always so distinct as to make it a simple matter to predict in any given case whether the system will be infected or not; but I do say that, according to my experience, there is a sore which is followed by syphilis, and that sore has the characters (more or less distinctly marked) of the Hunterian chancre, while there is another sore which has inflammatory characters and does not infect the system with syphilis.

The appearances of the chancroid, as I have noted them, have been these:—It is a painful, inflamed, suppurating, punched out, circular or oval sore, with red margins and yellow base, usually multiple, and can be reproduced on the same subject by inoculation. There is usually a profuse discharge. The surrounding parts are inflamed and painful. The inguinal glands are inflamed and liable to run on to the formation of buboes. These sores have a tendency to run a special course and heal of themselves. But, from frequent auto-inoculation, want of cleanliness, insufficient diet, or other causes, they may persist, or spread, or take on phagedænic action. The chancroid, when inoculated on the thigh (for instance), presents first the appearance of a red spot, then a pustule forms, which bursts and gives rise to the sore described above. This sore seemed to owe its origin, in most cases in my wards, to want of cleanliness along with a low condition of the constitution. In only a few cases could any history of direct infection be made out. I believe that any purulent fluid in a septic condition (and there was usually plenty of that about my patients), finding its way to an abraded surface, or into some follicle (of which there are numbers about the female genitals), may produce such a suppurating sore as I have described. For I believe the chancroid to be simply an inflammatory sore, and quite local in its effects.

Chancroids may increase to the size of a sixpence. I don't think I have seen them larger, but often much smaller. They are generally multiple: I have counted as many as nineteen on a patient on admission. A common number is from six to ten. They are generally situated in the folds between the labia majora and minora, or more commonly on the opposing surfaces of the latter. They are usually symmetrically placed directly opposite each other, this being evidently due to auto-inoculation. I have also seen them at the anus and on the inside of the thighs. A common place is at the fourchette. I don't think I have ever seen them inside the vagina.

My treatment of chancroids has been modified very much, and latterly simplified, and also, I am sure, much improved, since the introduction of iodoform as a remedy. I used to cauterize these sores, especially when phagedænic, destroying them with caustic potash or chloride of zinc. Now I simply dust them with iodoform powder and keep them dry, and they invariably heal up in a few days.

Iodoform is specially useful in the female on account of its power of diffusing itself and penetrating into corners. Formerly, with the caustic treatment, I was never certain that I had destroyed all the sores, and knew that if one was left the chancroidal action would reproduce itself. Now I can be perfectly certain that if I put on the iodoform freely the disease will be thoroughly checked. The action of iodoform on phagedænic sores is even more remarkable than on ordinary chancroids. My experience is that 24 hours, or at most 48, are quite sufficient to establish a healthy action in the sores. I use the iodoform pure, the crystals being pounded to a fine dust, which is blown on to the parts affected by means of the instrument which I show you.



It consists of a wooden tube, widened out at the centre, where the powder is placed, and then blown out at the nozzle by pressure (with the thumb) on the indiarubber ball placed at the other extremity. When the labia are held aside by means of Dr Henderson's forceps in the hands of an assistant, the surgeon can blow any quantity of the powder that may be necessary directly on the affected parts, and as these are always damp, a sufficient quantity of the iodoform adheres to destroy the septic action of the sores. If all the sores are not reached at first, a second or third application may be necessary. Generally there was sufficient dusted on to act on all the sores, even those that were out of sight.

Chancroids on a syphilitic person run an ordinary course, but are apt to be followed by condylomata.

Phagedæna was seldom seen. I believe it to be closely allied with erysipelas, for I have seen the latter arise from the introduction of the former into my wards; and, believing as I do, I have placed patients with phagedænic sores in the erysipelas wards, and with perfect safety to them. This might be an interesting subject for investigation by some of you, and might result in some valuable discovery. For instance, iodoform, which is so beneficial in phagedæna, may turn out as useful in erysipelas. We already know the value of tincture of iodine in that affection.

Buboes are most commonly associated with chancroids. Their character is essentially inflammatory. At first the glands are enlarged and indurated. The induration differs from that met with in syphilis, in that the glands are matted together in the former case. Usually one gland becomes more especially inflamed and tender. The parts over it become red and swollen. After a short time the superficial redness and swelling subside, the gland becomes more prominent, and shows evidence of having suppurated. If the bubo is left to itself, it reaches the surface in the ordinary way by thinning of the skin over it. After discharging, the bubo generally opens out rapidly and forms a sore which becomes chancroidal, and the discharge, when inoculated, is capable of producing chancroids.

The treatment I adopt is as follows:—In the earliest stages, rest and fomentations, which are often sufficient to bring about resolution, provided the chancroids are cured, or other irritative cause removed. When redness has occurred superficially, indicating involvement of the surrounding textures, I have seen the application of a few leeches beneficial. If there is evidence of suppuration I hasten the process of pointing by blistering and poulticing.

My experience has led me to believe that there is nothing to be gained by making an early opening. When a bubo is opened early it does not heal quickly, and sinuses are apt to form. And this occurs, I believe, for the following reasons:—1st, As the abscess is deep-seated, a dependent opening cannot be obtained. 2nd, As the diseased gland is not entirely destroyed, but yet is in a condition that will prevent its recovery, the process of suppuration will certainly go on, and will most likely give rise to burrowing and subsequent sinus. 3rd, As the surgeon has to cut through more or less of sound texture, the line of incision is liable to be infected by the pus of the bubo and take on chancroidal action. Antiseptic opening and opening with the thermo-cautery may meet and overcome some or all of these difficulties. But I have never employed these methods, being perfectly satisfied with the one I shall now describe.

Having left the bubo to mature, or rather, having hastened its maturation, when this is completed I incise it freely from end to end (a bubo is always ovoid), squeeze out the pus and sloughing texture, and then fill the cavity with iodoform. The result of this treatment, if properly carried out, is that a healthy action is induced in a day or two, and the sore heals in a week or ten days. I have one caution to give. The iodoform, if left too long in the wound, causes a weak or flabby condition of the granulations, and so impedes the healing process. Whenever the surface becomes clean and healthy I insert into the wound lint soaked in carbolic oil (1 to 40) or in red lotion. The other necessary points in the treatment are keeping the patient in bed (lying, not sitting up),

and keeping the edges of the wound from coming into contact, which is done by the piece of lint.

I have only once seen a phagedænic bubo. It arose from a phagedænic chancroid, but was speedily cured by iodoform. If there are sinuses, I treat them by free incision and keeping the edges apart till the wound heals from the bottom.

I have said nothing about the period of incubation of a chancroid, simply because no reliable data could be gathered from the majority of my patients, no statements of theirs being at all trustworthy. In some few cases, however, where the histories seemed to be distinct enough, from three to five days was the period stated.

Syphilis.—By this term I understand a disease the principal manifestations of which are an indurated chancre, indurated glands, periosteal pains, early cutaneous eruptions, condylomata, and mucous patches, also sore throat and iritis, succeeded after an interval by later eruptions, ulcerations, gummata, and periosteal affections. Syphilis I believe to be an eruptive fever, with special manifestations, and a power of so affecting the system as to leave (at least in many cases) permanent traces of its presence.

The early eruption in syphilis is preceded by feverishness. This I have frequently observed, and on one occasion noted a temperature of 103° Fahr.

I wish also to state here that I have seen cases in hospital and elsewhere which have greatly shaken my faith in the curability of syphilis. As examples, I would remind you of those numerous instances where those who have apparently recovered have yet transmitted a tainted constitution to their children. I shall now take up a few of the manifestations of syphilis.

The Chancre was very seldom observed in the Lock wards, for two reasons. In the first place, it causes so little inconvenience that patients do not apply for treatment. In the second place, it is not easily seen or recognised. Speaking from recollection, I should say there have been only nine or ten cases in the Lock wards during the last 4½ years. Of these about half were on the face. This latter fact shows that, were chancres as visible and inconvenient on the genitals, patients would present themselves more frequently for treatment; for labial chancre is undoubtedly rare. In other cases in which the chancre was observed, it was situated on the labium majus, at the fourchette, and on the cervix uteri.

The characters of the chancres which I observed were the following:—Absence of pain, redness, suppuration, and all signs of inflammatory action. Induration was not always present to a marked extent. When present it soon melted away. It was best marked on the lips. The ulcer was usually single, of a dark colour, and had a small amount of watery discharge. The course of the ulcer was towards healing, but on the genitals it was apt to turn into a condyloma.

I don't think careful note was taken of the time the chancres took to heal, but I should say it was about a fortnight or three weeks. The treatment adopted was the application of black wash, calomel, and laterally iodoform dusting. I don't think any of these applications did good beyond keeping the parts clean.

Such a sore as I have described was always followed by infection of the system, the first symptom of which (unless the chancre be considered the initial symptom) was *Glandular Induration.* This was always present. The glands were slightly enlarged, hardened, as a rule painless, and easily separable from one another. They differed from chancroidal buboes in a total absence of inflammatory signs, such as pain and matting together. The glands became softer after the lapse of months, and gradually returned to their natural condition. The time they took to recover varied much in individual cases.

I used to think that the condition of the glands was a safe indication for treatment, but I have found that the constitutional manifestations bear no direct relation to the glandular condition. The glands in most direct relation to the chancre were those first, most, and longest affected with the induration.

I have seldom found the epitrochlear gland indurated, though when I was in Vienna I used to see it affected in almost every case. I have never directed any treatment towards the glands specially, believing that they required none. I have not seen syphilitic glands suppurate. I have certainly seen suppurating buboes on a syphilitic person, but there was always some distinct and separate cause for these.

Pain over the sternal, acromial, malar, and other bony prominences, evidently periosteal, frequently appeared as an early symptom of syphilis. It manifested a rheumatic character, being worse at night, worse when the parts were exposed to cold, aggravated by pressure, prevented by covering the part over with wadding, and completely removed by large doses of potassium iodide and the application of warmth. There was sometimes severe headache, also, which was of the same character and removed by the same remedies.

Condylomata were by far the most common syphilitic affection seen in the wards. They were usually early in appearing, sometimes also late. They may present themselves any time during the so-called secondary period—that is to say, within the first six or nine months of the disease.

A condyloma is an oval or rounded elevation occurring on the skin, or rather *in* the skin. It is caused by an exudation identical, I believe, with that which causes the induration of a chancre. I believe this because I have seen a chancre turn into a condyloma by imperceptible gradations; and I have likewise seen a spot of syphilitic eruption become a condyloma without one being able to say when it ceased to be the former and became the latter.

Condylomata spread by their margins, and so often coalesce and form a string or long band, thus losing their characteristic rounded form. They seldom become much elevated, but I have seen them become papillated on the surface in those who had a tendency to warty formations. Warts may also exist side by side with condylomata. The former, however, are essentially non-syphilitic, while the latter are, I believe, always syphilitic. At least I have never seen condylomata except on syphilitic subjects.

Condylomata frequently become ulcerated and discharge purulent matter from their surface. The ulcer, however, is quite superficial, and the suppuration is more of the character of a rapid desquamation. On healing they leave no cicatrix. Ulceration only occurs where the parts affected are allowed to become very dirty and sodden with discharge.

Condylomata owe their existence to the presence of moisture and warmth. They grow, therefore, mostly on the genitals in the female, but I have also seen them in the groin, on the inside of the thighs, round the anus, under the mammæ, in the axilla, between the toes, and occasionally on the back of the neck, under the roots of the hair. They grow most luxuriantly on the labia majora, where they sometimes become pedunculated from their pendulous position. I have seen a condylomatous mass extending on both sides from the pubes to behind the anus, like two enormous sausages. As condylomata are produced readily by the irritation of moisture and warmth, the treatment for their removal must necessarily be the application of what will keep them dry and cool. After trying many remedies, I have latterly used only dusting with calomel, and the interposition of a piece of dry lint between the labia. The calomel has no specific action, being insoluble; but it adheres readily to moist surfaces, and, being heavy, it flies in a fine cloud from the dusting instrument. A wonderfully small quantity suffices. Of course the patient must wash and dry herself thoroughly before the dusting, and again before night.

I have frequently demonstrated to the students that a single week of calomel dusting, without any internal or other treatment whatever, has made a great difference on even the worst cases. I usually allow about three weeks for a cure. Sometimes hardened bases remain, which soon disappear under the application of sulphate of copper in the solid form. I do not use this more stimulating remedy earlier, because it is painful and not one whit more efficacious than the dusting. Internal treatment may assist the cure, but is not necessary, the affection being due to local causes.

Patients have not unfrequently returned with condylomata as bad as ever, after complete removal, the result of their neglecting to keep themselves clean. Of course it would be preferable to keep the patients in hospital till they are cured of the tendency to syphilitic manifestations, but the number of beds I had at my

disposal (only 14 in the old Infirmary and 16 in the new) prevented my being able to do this. I was obliged to send out patients whenever they were relieved or cured of the existing manifestations, in order to admit those who were much worse and who more urgently required treatment.

Mucous Patches are the same as condylomata occurring on mucous membrane. They present the appearance of slightly elevated whitish patches, usually of a rounded or oval shape. They occur principally in the mouth, and are situated at the angles, on the lips, on the gums, on the inside of the cheeks, where they come most in contact with the teeth (notably beside decayed teeth), on the tongue (at its margins or on the dorsum), at the pillars of the fauces, and on the tonsils. In the last situation the patches resemble condylomata on account of the tonsils becoming thickened and hypertrophied at the spots affected. Mucous patches also occur inside the vaginal orifice, and I have seen them inside the nares.

As they cannot be kept dry, they must be treated differently from condylomata. In the first place, all sources of irritation must be removed. Decayed teeth must be extracted, smoking stopped, the mouth kept clean by brushing the teeth, etc. For local application I have found the green stick most useful, firmly rubbed on the mucous patches twice or thrice daily (sulphate of copper, with a fourth or fifth part of borax to assist fusibility). In some cases I have seen benefit from a mouth-wash or gargle of corrosive sublimate, $\frac{1}{2}$ or $\frac{1}{4}$ gr. to the ℥j.

Mucous patches generally disappear very quickly under proper treatment.

We now come to the subject of *Eruptions*, and for convenience I will not separate the earlier from the later forms. I prefer to use the terms "earlier" and "later" instead of the old names "secondary" and "tertiary," because I do not believe the earlier eruptions are secondary: they are in reality primary.

The period of incubation, from infection till the appearance of the eruption, could not well be calculated from the class of cases I had in my wards, because in the majority of instances the girls could not be certain of the exact date of infection, and, besides, were they to attempt a statement, it would be very unsafe to rely on it. Judging from the few cases I had where there was a chancre present on admission, I would say that an early eruption is likely to appear from six weeks to two months after infection.

Eruptions varied much in amount, being often very slightly marked, and in other cases very extensive and well marked. They were sometimes, and not by any means unfrequently, so faintly marked as to escape the notice of the patient. This I have often demonstrated to my class. Patients have stated that they had no spots on them whatever, while I have been able to

demonstrate a few (quite sufficient to establish a syphilide) on the shoulders or chest. I have seen this so frequently, that if I have good reason to suspect syphilis from symptoms present, I never trust the patient's statement in the negative, for I know that there may have been an eruption so mild that it escaped observation. On the other hand, I have known eruptions which were not syphilides, more especially acne, psoriasis, and scabies, mistaken by patients and others for syphilitic.

The localities which should be examined when the eruption is scanty are the back of the neck and shoulders, the chest, and abdomen. Early spots occur also on the front of the arms and the inside of the thighs.

Syphilitic eruptions have certain peculiarities, which I have noticed more or less regular in their presence.

Firstly, The eruption is not the same all over the body: there is a mixture of the different types, such as papular, squamous, pustular, tubercular, etc.

Secondly, The spots early show a tendency to desquamate. Take a papular eruption, for instance. The apices of the papules will almost at once show a few loose scales, and as this goes on the eruption becomes papulo-squamous.

Thirdly, The eruption shows no definite order of appearance on the different parts of the body. It usually comes out in successive crops on any or all parts of the body. I have seen a few cases, however, in which the eruption appeared first on the upper part of the body and travelled down, disappearing in the same manner.

Fourthly, The spots, when closely examined, are always found to be raised above the surrounding skin by what seems to be a certain amount of new deposit. This, I think, is proved by the fact, already referred to, that this base may change into a condyloma. It is this, I believe, which constitutes the special character of a syphilide. I have not examined into the special pathology of eruptions by making microscopic sections. I speak only from clinical observation. If it be true that the base of a chancre, of a condyloma, and of a syphilitic eruption spot is the same formation, it would explain at once how the transition occurs so easily from the one to the other, and how eruptions vary so readily and quickly in appearance. It would also demonstrate that a chancre is really a result of constitutional infection as much as an eruption or a condyloma.[1]

[1] I have submitted this opinion to my friends Professor Hamilton of Aberdeen and Dr Allan Jamieson, Lecturer on Skin Diseases in Edinburgh, and they both tell me that there is no difference perceptible in the histological structure of the base of a chancre, condyloma, or syphilitic eruption spot. In each instance there is considerable proliferation of epithelium from irritation, and great exudation of leucocytes, with dilatation of the bloodvessels. It is therefore quite plain, on the one hand, how the three manifestations are convertible; and, on the other hand, it is evident that, as this tendency to a

Fifthly, Syphilides have a coppery hue, which appears sooner or later, but generally not at first. The copper marking is at the base of the spots.

Sixthly, Syphilitic eruptions tend to persist. They come out in successive crops, and while they die down at one part, fresh spots come out in the neighbourhood or at some other part.

Seventhly, These eruptions are frequently followed by maculæ or stains, which are either dark brown or purple.

During the early eruption period syphilitic persons have a peculiar condition of the skin of the face which I consider to be quite characteristic, though very difficult to describe. It consists of a roughness of the cuticle and a fissured or puckered state of the margins of the mouth and nose. I have never seen this condition of the face except on a person affected with syphilis.

I shall now take up a few of these eruptions separately. I cannot go fully into them all, but will merely refer to such points as have occurred to me as being worthy of special remark from their rarity, or still more as being worthy of your attention from their clinical value from being common.

Among these latter let me say a few words on *Psoriasis Palmaris*. This affection I have frequently seen, and have from it been enabled to diagnose syphilis in otherwise doubtful cases. I have found it present most frequently along with a papular or papulo-squamous eruption. At first there are a few spots on the palms of the hands, slightly elevated, and of a coppery colour. These, if left alone, become larger and more numerous. The skin of the palm then becomes thickened and fissured. You will see from this description that the affection is not psoriasis, though it is thus called.

There is another affection of the palms of the hands which occurs in gouty persons, and which resembles the syphilitic form somewhat. It differs, however, in the following important points:—It is not coppery in colour; there is fissuring of the points of the fingers; and it is very difficult to treat, being liable to relapse. The syphilitic affection, on the contrary, I have found very readily removed by the application of an ointment consisting of equal parts of ung. hydrarg. and vaseline.

True *Psoriasis*, affecting the elbows, knees, etc., I have seen on syphilitic subjects, and found it give way to ordinary treatment, arsenic, tar, chrysophanic acid, etc. On the other hand, I have seen a psoriasis-looking eruption which resisted these remedies, but was removed at once by anti-syphilitic treatment.

Eczema I have observed on syphilitic patients, due, I believe, to irritation, and occurring in persons liable to this affection. The irritation has been either a discharge from an eruption or from a gonorrhœa, or scabies. For example, I have seen eczema on the

special form of exudation is the result of a constitutional taint, the induration of a chancre is a proof that the system is already syphilitic.

ears, etc., associated with a pustular syphilide on the scalp, on the arms from the irritation of scabies, and on the pudenda from that of a vaginal discharge. The eczema, I need hardly say, was not syphilitic, though maculæ were left by it on account of its occurring on a syphilitic subject.

Scabies was frequently seen in the wards. I think a majority of the patients suffered from this disease, some of them very severely. Sometimes there was a little difficulty in the diagnosis, but the occurrence of vesicles or pustules between the fingers and round the wrists generally made matters clear. Although these parts were most constantly affected, scabies was observed on many other regions of the body—on the thighs and genitals, on the mammæ, in the neighbourhood of the axillæ, round the waist, on the hips, on the front of the arms, etc., and in some cases hardly any portion of the body was unaffected. This eruption, though non-syphilitic, frequently left well-marked maculæ.

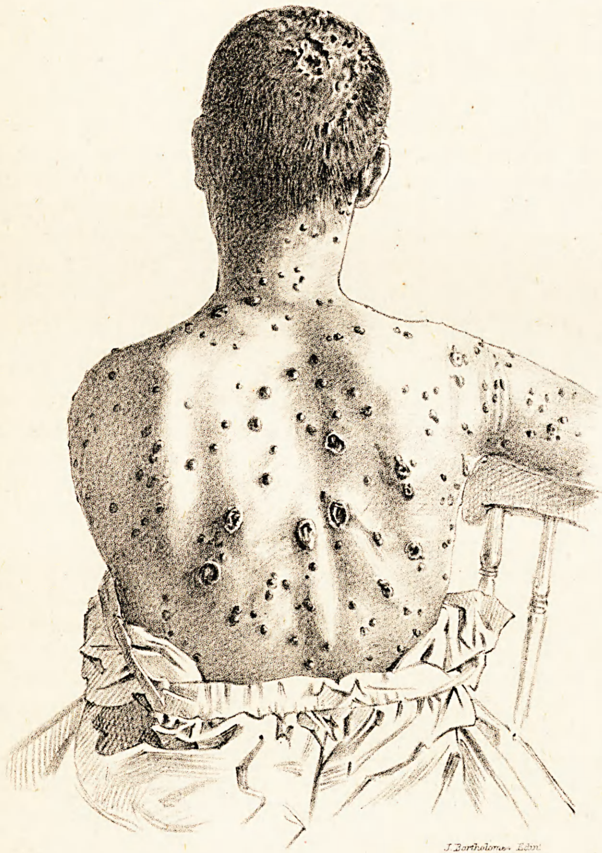
The most common syphilide seen by me was a papulo-squamous form, appearing first about the neck, shoulders, and chest, and presenting the appearance of a slight elevation with a scaly apex, and sooner or later a coppery colour.

Syphilitic Lupoid Ulceration affecting the face, and closely resembling lupus exedens, I found not uncommon, and always very amenable to treatment. I had two cases, also, where the genitals were the parts affected. The effect of treatment in these cases will be best seen by my quoting briefly a typical instance of lupoid ulceration of nose and upper lip.

CASE I.—Seven months before admission a pimple appeared on the nose, which broke and spread rapidly by ulceration. On admission there was seen an ulcerated surface, about an inch and a half in width, occupying the position of the nose, which had been almost entirely destroyed. There was also an ulcerated surface on the upper lip. The ulcers had tuberculated margins. There was a history of syphilitic infection four years before admission. Treatment—vaseline to the sore, and potassium iodide internally, gr. xx. thrice daily. A few days after the commencement of treatment a superficial slough separated from the entire surface of the ulcer, which left behind a healthy granulating surface, and cicatrization began immediately thereafter. Marked progress was perceptible from week to week, and in less than three months the patient was dismissed cured.

Serpiginous Ulcers I have found do well under the iodide internally and the application of chloride of zinc as a caustic, or Volkmann's spoon locally.

Before leaving the subject of eruptions I wish to describe a very remarkable case of mixed eruption which occurred in the wards quite recently.



Mr A. G. MILLER'S Paper.—Case II. Mixed Syphilitic Eruption.
From a Photograph.

CASE II.—On admission patient was found to have a papulo-squamous eruption on her breast, back, legs, face, and head, which was mixed with pustules, and also about a dozen rupial spots with limpet-shaped crusts. Patient had a chancre on the left labium majus, two chancroids, and a suppurating chancroidal bubo. The eruption during nearly three months persisted, coming out in successive crops, and retaining its mixed character almost to the last, the whole body being covered with papular, squamous, pustular, and ulcerated spots mixed together. There were latterly a few spots, also, of a tuberculated character. Thus a later type was mixed with an eruption occurring at an early period. Another interesting feature in this case was that mercury was not well borne, a few doses of the perchloride (gr. $\frac{1}{32}$) being sufficient to cause salivation. A mixture of chlorate and iodide of potassium seemed to benefit, and thus the late type was again evidenced in the remedy which was beneficial. This was remarked by Dr Allan Jamieson, who kindly came up to the wards on purpose to see this patient. (The plate represents the eruption when it was about its worst.)

Iritis was not uncommon, and was always easily cured by mercury internally, atropine to dilate the pupil, counter-irritation to relieve pain, and a shade over the eyes. There was usually a greater or less amount of keratitis present, which perhaps accounted for the pain and photophobia which generally existed to a considerable extent.

There was, a short time ago, an interesting case of *purulent ophthalmia* in an infant who came into the wards along with its mother. Believing that the danger in such cases consists in the retention of the pus in contact with the eye, I gave the nurse instructions to have the child's eyes syringed out with a weak solution of alum five or six times a day, oftener if necessary, to keep the eyes free from pus. After a day or two, when considerable improvement had taken place, a weak solution of nitrate of silver was used. To the credit of the nurse, a complete cure resulted in about a week.

Ulcerations of Mouth and Nose were not common. They occurred in late syphilis, and were benefited by iodoform locally, and potassium iodide and tonics internally.

Ulcerations of the Throat, occurring in early syphilis, were not severe, and generally disappeared speedily under the local application of the sulphate of copper or a mercurial wash.

Gummata were frequently seen in all stages, from a "small lump" to a completely softened and broken-down mass resembling an abscess. These were all treated the same way, namely, with large doses of potassium iodide. In no instance was the knife necessary, but in every case the gumma (hard or soft) was absorbed. In some few cases a local stimulant to absorption (in the shape of

iodine liniment) was used to assist in the removal of the last traces.

Two cases of so-called *syphilitic phthisis* occurred under my care. The disease was associated with ulceration of the larynx, and appeared late—about two years after infection. The symptoms present were cough, shortness of breath, and expectoration of clear frothy sputa. The signs were, slight dulness posteriorly over the greater part of one or both lungs, with mucous râles. The condition is one of interstitial deposit of gummatous material in the connective tissue around the lobules, mostly in the superficial parts of the lung posteriorly. This is associated with a catarrhal condition of the air-tubes, which is either the cause or consequence of the syphilitic deposit; I am not prepared to say which. The disease was rapidly removed by the internal administration of potassium iodide and the external application of a liniment containing equal parts of comp. camphor and croton liniments.

I wish now to make a few remarks on the actions of certain remedies as observed in my wards.

Mercury I take first because there is so much diversity of opinion as to its advantages and disadvantages in the treatment of syphilis. I have always believed that it is useful. My faith has not always been equally strong; but it has always existed, and still remains. When I first got charge of the Lock wards I determined to experiment on the action of mercury by treating half my patients with it and half without. The exact results I cannot give you, unfortunately, on account of the loss of the case-books, as I told you already; but I can tell you what I recollect of the results, and what was the effect on my practice, and you can receive what I say for what it is worth.

The first thing I remember is that now and then we had to shift a patient to the mercurial side because she was not getting on so well as the others. Another thing I remember is that the non-mercurial patients who went out of hospital apparently cured came back to us very soon again, and to these I always gave the mercury. The third thing I remember is that I ultimately gave up the arbitrary division of the ward, and treated my cases just as I thought they required. Of late I have given mercury to almost all my patients in the earlier stages of syphilis.

The form in which I gave the drug was the bichloride in solution, $\frac{1}{16}$ or $\frac{1}{32}$ grain doses. I employed this form for the following reasons. I began with it, and wished to keep to the one form of administration, that I might the better judge of results. Secondly, I consider it the purest form in which to give the metal. In almost all other preparations there is some other medicinal agent combined (as iodine, for instance). Thirdly, I think that salivation is more easily avoided, because the irritant action is earlier shown. I have hardly ever seen my patients salivated, because I

stop the mercury whenever the stomach or bowels show signs of irritation.

In many instances mercury was beneficial. Let me give one instance.

CASE III.—A married woman was admitted who had a well-marked eruption of a papulo-squamous character with intense coppery staining. On admission she was given potassium iodide without any improvement being noticed. Mercury was then given, when at once she began to improve, and in less than three weeks the eruption had entirely disappeared. Some may say that the removal of the eruption was not the cure of the syphilis. Perhaps not; but the cure of the eruption was a matter of great importance to the poor woman.

I have seen mercury do good in another form. There were eruptions, both specific and non-specific, which seemed readily curable only up to a certain point if on a syphilitic subject. In such cases the application of a little blue ointment generally removed the last inveterate traces in a few days. You will remember that I found mercurial ointment beneficial in palmar syphilis.

I believe, therefore, that mercury promotes the disappearance of eruptions, and that consequently it ought not to be discarded. As to its supposed power of postponing or modifying eruptions when given before their appearance I cannot speak. I also consider that mercury is occasionally useful in late syphilis in combination with potassium iodide. The former seems to assist the action of the latter.

I administered mercury always with a view to benefit symptoms, and was always guided by its effects on these as to the amount to be given. I never saw any harm arise from the use of the drug as I gave it. One or two cases of aggravated late syphilis I saw in which mercury had been given previous to admission to my wards, and in which there had been salivation to a greater or less extent. I cannot say that the severity of these cases was due to the mercury, but it may have been.

After reading the accounts given by the older writers (such as Hunter, Colles, etc.) of the fierce salivations to which they subjected their patients, and comparing both treatment and results with what I have seen in my own wards, I cannot but think that some marvellous change has come over either the constitutions of this generation or over the disease. On the former point I do not consider myself competent to judge, not having the different generations to compare together; but of the disease I can say that the manifestations are less severe. Even within the last twenty years I am certain that the symptoms of syphilis are, as a rule, milder; and I do not see now as aggravated cases of late syphilis as were brought under my notice when I was a student, or were under my care when I was resident surgeon to the Lock Hospital in 1865. Whether or not this change for the better among the latter

is due to the treatment with large doses of mercury having been given up, I am not prepared to state.

Iodide of Potassium I wish now to refer to shortly. I believe it to be *the* remedy in later syphilis, but it has its uses occasionally in the earlier manifestations also, as in the periosteal pains and headache to which I have already referred. In these cases large doses are necessary (30 grains).

All the later manifestations are benefited by the iodide; some of them disappear entirely, as I have already told you, under the administration of this medicine alone.

The rose has its thorn, however, and even the iodide has its drawbacks. In some persons the iodide produces spots of acneform appearance, which generally affect the face considerably. This, in my opinion, is no trifle; for though the eruption dies down on the iodide being stopped, there may remain copper-coloured markings. Any spot on the skin of a syphilitic person, whether due to the syphilis or to some irritation, even the mark of a mustard plaster, may be followed by copper staining. This you should remember, and not needlessly apply blisters or other irritants on conspicuous parts, nor continue the use of the iodide, if it can be avoided, when it produces spots on the face. I am in the habit of giving potassium iodide in gr. x. and gr. xx. doses, usually with some tonic, as quassia, iron, or ammonia, as a stimulant to counteract its depressing action. I must say, however, that I have never seen the iodide cause depression; on the contrary, I have been able frequently to point out to the gentlemen attending the weekly demonstrations in the Lock wards that it acts as a tonic in the later stages of syphilis. Patients even get fat on it. When symptoms of iodism appear, I always stop the drug and give tonic treatment.

Hydriodic acid I have given in a few cases lately, and been pleased with its effects.

Iodoform I consider the most valuable addition to the treatment of venereal diseases that we have had for many years. I have already said a good deal about its usefulness in chancroids, chancroidal buboes, phagedæna, etc. I may add that I have found it very useful, also, in the later manifestations of syphilis, such as ozœna, ulcers of the mouth, nose, etc. For these cases I use it as a fine powder dusted on, or suspended in vaseline or glycerine, in the proportion of from gr. x. to ʒj. in the ounce. I have used the drug very freely, and have never seen any bad effects; but as the application has almost always been to suppurating, and therefore non-absorbing surfaces, effects upon the system are not likely to have occurred.[1]

[1] As the great drawback to the use of iodoform is its disagreeable and persistent odour, the following mixture for covering the odour will be interesting to you, and valuable to the profession. It is the invention of Mr Charles Arthur, the chief dispenser to the Royal Infirmary :—Iodof., ℥ij. ; ol. eucalypt., ♏15 ; ol. verben., ol. mirbane, ol. lavand., ol. limon., āā ♏ 5 ; M. This mixture does not in any way interfere with the use of the iodoform as a powder.

Before closing this lecture, allow me to say a few words on the dieting of syphilitic patients. The disease is undoubtedly debilitating, and, from its nature, depressing: appetite and digestion are usually bad. Accordingly proper treatment implies nourishing food as well as appropriate drugs. Food, to be nourishing, must be digestible. As an example of what I mean, allow me to refer to the case of a girl who suffered from lupoid ulceration of the vulva. She had received a variety of treatment, both locally and generally, and when she came under my care was being fed on beefsteaks and porter. Notwithstanding all this she was emaciating steadily, and was supposed to be dying. I changed her diet to milk, and gave her Mackenzie's cod-liver oil emulsion. She at once began to improve, the ulceration took on a healthy action, and in the course of time she became quite fat and strong. This leads me to say that I have never administered alcoholic stimulants in my wards as a remedy or in any other way except once, when I allowed porter to a poor girl who was dying of phthisis, and who asked for it, fancying it would give her some appetite. This was the only fatal case I had during the four and a half years. Several severe cases were admitted to the wards, and my clerks have remarked that such a case would be sure to die, or such another to require stimulants. As I have already said, syphilis is a debilitating and depressing disease. For all that, alcohol is not indicated; on the contrary, I believe it would be injurious. Even my worst cases have all improved under appropriate diet and remedies. I have seen patients emaciated, so weak as to be hardly able to stand, and covered with gummatous sores, who got well and strong in a few weeks on milk diet and potassium iodide, the latter acting as a powerful tonic.

I have now given you my experience, though in rather fragmentary a form. But what I have said has occupied so much of our time that I cannot even attempt to collate the facts or generalize on them. I hope, however, that you have taken notes of my statements, which will be useful to you when we come to consider the subject of venereal diseases in our regular course, and, I trust, will also be of service to you when you enter on the practice of your profession.

Article II.—*The Cardiac Inorganic Murmurs in Debility and Anæmia: a Reply to Dr Balfour of Edinburgh.*[1] By William Russell, M.B., Honorary Physician to the Carlisle Dispensary.

Out of deference to Dr Balfour's feelings, and as I have no desire to pose as a reformer of medical nomenclature, the title of this paper has been modified sufficiently, I hope, to soothe the one and remove any suspicion of the other. I refrain, however, from

[1] Dr Balfour's paper is published in the *Edinburgh Medical Journal* for September. My paper appears in the same journal for August.