HARVEIAN LECTURES
ON LUPUS.

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LECTURE III.—ON THE VARIOUS FORMS OF LUPUS VULGARIS AND ERYTHEMATOSUS.—[*With Lithograph.*]

Difficulties of Classification.—The Bacillus in Lupus Necrogenicus.—Acne-Lupus (Lupus Follicularis Disseminatus of Tilbury Fox).—A Mixed Form of Chilblain-Lupus.—Lupus-Psoriasis (Dr. Stephen Mackenzie's Case).—Lupus in Relation to Port Wine Stains.—Lupus Lymphaticus.—Rupia-Lupus of Young Children.—Nævus-Lupus.—Alliances of Rhino-Scleroma and Sycosis with Lupus.—Kaposi's Disease.—Hebra's Xeroderma, a Family Form of Lupus.—On the Varieties of Lupus Erythematosus.—On Lupus-Cancer.—On Syphilitic Imitations of Lupus.—Concluding Remarks.

THE classification of diseases is easy if we permit ourselves to keep aside unusual and ill-marked forms. If, however, we endeavour to comprise all, it becomes sufficiently difficult, and to lookers-on it may appear that needless complexity and useless detail are introduced. There is, however, a great and obvious gain in the conscientious admission of all witnesses, for very frequently we find unexpected testimony borne which proves of great value to the discovery of truth. The rare and the minor forms of disease are precisely the connecting links between the larger groups, and they enable us to see their continuity and to trace their relationships.

In our last lecture I had to bring before you the subjects of struma-lupus, eczema-lupus, lupus mutilans, necrogenic lupus, and some others. Most of these are rare, but still very real, sub-species of the disease, and I shall be obliged, on the present occasion, to trouble you with the description of others some of them of even greater rarity in practice, but all of equal importance, to complete the picture of the group of diseases which we are investigating.

Before proceeding to fresh topics, I wish to supplement by a few words what I said last week as to lupus necrogenicus. I omitted to mention that observers have found the tubercle bacillus in great abundance in the granulation growth which attends this malady. I make this statement chiefly on the authority of Riehl and Paltauf, who found the bacillus more easily in it than in sections of common lupus. This is interesting because, in the first place, this is the only form of lupus in which contagion seems at all probable. The others, it is true, often begin from local irritation, but it is usually of a kind not in the least likely to convey infective material (chilblains, insect stings, and the like). We know nothing of lupus as a disease capable of spreading by contagion from one person to another. In the necrogenic form, beginning as it does from dissection pricks, it is easy to suppose the transference of bacilli possible. It is remarkable, however, if that be so, that it is precisely the form of lupus which shows the least tendency to spread. It rarely produces satellites, and I never in a single instance knew it followed by patches on other parts of the body, nor by anything indicating visceral tuberculosis. In our last lecture I instanced a case in which it had been present for forty years without doing any harm. On the other hand, lupus erythematosus, in which, so far as I know, the bacillus has not been found, is very infective, and is very frequently associated with a tuberculous family history.

I give the name *acne-lupus* to a disease which was, I believe, first described by the late Dr. Tilbury Fox under that of lupus follicularis disseminatus.[1] I am sorry to propose a change from that used by a dermatologist so distinguished, but I believe that mine expresses more with greater brevity, and will be more easily remembered. It is obvious that they imply the same thing. The disease is a combination of acne with lupus, or rather, perhaps, it is lupus attacking acne spots. I have seen but very few good examples of it, but it is a very definite variety of the disease. In the case of a young man named S., whose sister's case I have already detailed to you, both cheeks showed acne spots. On the left cheek, however, many of the spots had enlarged, and were obviously of the apple-jelly structure. There could be not the slightest doubt that they were lupus, and equally little that they were arranged like acne, and occurred in connection with sebaceous follicles. This young man had also lupus of his alæ nasi and of his palate. As already recorded, two of his sisters had somewhat similar affections, and the family was decidedly strumous. Acne-lupus is a form of common lupus, and not of the erythematous division. It is, so far as I have seen, never symmetrical, and the apple-jelly is very characteristic. It is of interest to note that it never attacks acne spots on the back, but occurs, I believe, on the face only, illustrating what we have had so frequently to ask attention to, the influence of cold and exposure as causes of lupus. I show you portraits taken from another case, but in it the conditions were not so definite as in the lad S.

The group of cases which I have next to describe is one to which I find it extremely difficult to give any concise name which shall, at the same time, be appropriate and descriptive. It is lichen, acne psoriasis, eczema, chilblains, and lupus altogether. Yet it is a definite disease, and one case is like another. It begins in early childhood, and it affects the parts which are exposed. Thus I have no doubt that it has affinities with Kaposi's disease, but I have not as yet seen it in more than one member of a family. If it happened to several brothers and sisters, it would be at once accepted as a modification of Kaposi's disease. In my own notebooks, in default of any name, I have been in the habit of classing its cases as belonging to "the Philip Holmes series." Now "Philip Holmes" was the youth whose condition is depicted in the portraits which I now show. His was not the first case that I had seen, but it is one of the best, and it is the only one of which I have preserved an illustration. Holmes's grandfather had been the subject of psoriasis. The boy in infancy had a rash which was called red-gum, and which never quite left him. I saw him first in 1874, when he was 11 years old, and the portrait before you was taken in 1877, when he was 14. He was florid but rather delicate, and had a cough. You will see that his cheeks (the conditions were quite symmetrical) were covered with acne-like pustules, some of which spread at their bases, and are exactly like acne-lupus. His whole ear was in a condition of eczema-lupus, and on his forearms and hands were ulcerating pustules and patches of various sizes. Everywhere the eruption was leaving scars when it receded, and the largest scars were on his elbows and backs of forearms (the psoriasis positions). A tendency to produce stigmata (a prominent feature in Kaposi's disease) was very marked. There had been bad chilblains on the feet. This eruption was, however, much more than mere chilblains. It had then been persistent for years, and it remained so during the five years more that the youth was under my observation. In some respects it was worse during cold weather, but often, like psoriasis, it relapsed "in spring and fall." It was not a disease of the sebaceous follicles only, for there were scars also in the palms. I find in the older atlases one or two portraits which bear upon this malady, so far as to show ulcerated and lupoid eruptions on the elbows and forearms, arranged like psoriasis, but none of them either delineate or describe the patient's face.

I possess the notes of several cases like that of Philip Holmes, and have seen several others of which I have preserved no notes. The cases constitute very important connecting links. I have no doubt that the eruption results from inherited peculiarities in the organisation of the skin and the general health-status of the patient very similar to those so wonderfully displayed in cases of Kaposi's disease.

Closely allied to the cases just mentioned, but with important differences, are the forms known as psoriasis-lupus, and well illustrated in the full length and excellent portrait which I now display, and which has been lent me by Dr. Stephen Mackenzie. There is no doubt whatever as to this case being one of lupus; probably the case of Dr. Jamieson's, from which we borrowed our microscopic illustration last week, was very like it. The question is whether it should be called vulgaris or erythematosus. You will see that it has notched the nostrils like vulgaris, and that it presents definite thickening of the skin, not easily distinguishable from apple-jelly growth. Still, as it is arranged with symmetry, I prefer to consider it as erythematous, and as it affects the exposed parts and began in youth, I must again call your attention to its similarity to Kaposi's disease. Indeed, if I place side by side Dr. Mackenzie's portrait of lupus-psoriasis and Dr. Radcliffe Crocker's of Kaposi's malady, you would be puzzled to distinguish them. A sister of the subject of this psoriasis-lupus patient had common psoriasis, a fact of much importance in reference to my assertion as to hybridity. The disease began at the age of 16 all over the face, and subsequently affected the neck, forearms, and arms. Finally, and this is very unusual, it even involved to some extent the trunk, abdomen, and chest. You will see that the eruption is dusky and erythematous, that it leaves scars, and

[1] I had previously exhibited a portrait of acne-lupus under that name in the Annual Museum of the British Medical Association, but I had not published any account of it.

that, as already noted, it has taken away the alæ nasi. This case is in some respects a better illustration of psoriasis-lupus than the one which I published under that name many years ago in the New Sydenham Society's *Atlas*.

I almost fear that I may incur the charge of audacity in suggesting such a name as *nævus-lupus*. My meaning is, not that lupus sometimes become nævoid, nor that a nævus may sometimes looks like lupus, but simply and definitely this, that skin in a nævus condition may become affected by the lupus growth, and I assert that there are certain very rare cases in which the one process does really become engrafted on the other. The combination may occur with different results, the latter varying with the kind of nævus which is attacked. Sometimes it is the thick, mixed nævus so commonly seen in infancy, and sometimes it is the port wine stain; if the former, it is always in very early life; if the latter, it may not be till puberty or after. My attention was first attracted to this subject by a case which my friend Mr. Higgins was kind enough to transfer to my charge at Moorfields many years ago. Its subject was an infant who had been born with a nævus on the side of the head. At the time of birth the nævus was so small that it was not noticed, but it developed as small red spots on the temple at a week old, which spread and ulcerated until a considerable part of the face was covered with scar, and the lips and nose were attacked. Part of the nose and of its septum were destroyed. In this instance satellites were produced near to the edge of the parent nævus. Thus we had serpiginous spreading, infection by contiguity, ulceration, and scarring—the characteristics of the lupus process. It was not without great interest that I discovered, a few days ago, amongst the plates published by Dr. Anthony Todd Thompson, the portrait which I now produce. It shows a nævus of considerable thickness and of very large extent, covering one side of the head and a considerable part of the face. It was still spreading when the child died of meningitis, and Dr. Thompson notes especially that it not only crept on at its edge, but that it showed a tendency to produce little islands of nævus structure in the skin near to it—satellites. We have in this instance proof only of infective tendencies, for I believe there had been no spontaneous ulceration. The important point is that the child at the time of birth had no nævus at all, at least none large enough to attract its mother's attention.

My next case is one for the opportunity of seeing which I was indebted to Sir William Gull. The child had been the subject of careful observation from the time of her birth. She was a young lady of 17 when I saw her. Within a week of her birth, an exceedingly slight port wine stain was observed on the right arm, a little above the elbow. For some years no change occurred, and then the stain began to spread at its edge, producing abruptly margined rings, near to the edges of which minute satellites would appear. In this way gradually a large part of the back of the arm and forearm became covered, and the condition was produced which is shown in the drawing which I have placed before you. Where the disease had receded there were indications, slight I must admit, but definite, of scarring. Thus the disease proved its affinity to lupus by a steady, slow, infective spreading, and by disorganising the tissue in which it had occurred. If anyone should incline to object that my cases are, after all, only examples of nævi showing a tendency to spread at their edges, and to leave scars, I have only to reply to him that our difference concerns only words. An infective scar-leaving, ulcerating nævus differs widely from what is usual in common nævus, and assumes the characteristics of lupus. If we refuse to recognise it as one of the lupus group, we shall lose, I believe, an important link of connection between the latter and certain other maladies, which I am about to describe.

I possess a portrait, dated exactly 50 years ago, and bearing the signature of William Bowman, now Sir William, which formed part of a collection of drawings made by the late Mr. Partridge. I am not in a position to give any facts as to the case, excepting such as the portrait itself puts in evidence. It shows a child with a large tumour under the skin of the chest, in all probability one of the congenital cystic and nævoid forms. On the surface of the tumour are a number of little, apparently vesicular, outgrowths, which show minute tufts of vessels. I dare not lay much stress upon a mere portrait without any cotemporary description, were it not that I have more than once seen an exactly similar state of things in the living subject. At the College of Surgeons, not long ago, Mr. Bryant showed me a patient who had had from birth one of these subcutaneous nævoid tumours, and over it quite recently a small development of minute serous cysts (lymphatic?) had been formed, some of which showed minute capillary tufts. At a meeting of the Pathological Society, now nearly ten years ago, the late Dr. Tilbury Fox, brought for demonstration a young man upon whose thigh a large port wine stain had been present from birth. Near to this stain, though not actually upon it, there had recently been developed a number of serous cysts, just like those which I have mentioned. With these cysts were minute capillary tufts. Dr. Tilbury Fox, by microscopic examination, proved that the cysts had been developed from lymphatics. The disease was an infective one, and its patches were spreading at their edges and producing satellites. Although in this instance the morbid conditions which had recently occurred were not actually on the port wine stain, still they were so near to it that I have little doubt that it had been the cause of their development, and that the case might be claimed as being closely allied to nævus lupus. I feel sure that there were only differences of degree between it and Sir William Gull's patient.

The statements which I have just made lead me by a short step to the description of a variety of the lupus process, in which I believe that the lymphatic spaces in the skin are the parts chiefly involved, or at any rate which has for its chief feature the production of little vesicular outgrowths, which contain a lymph fluid. This is the disease to which some years ago I gave the name lupus lymphaticus. It is a very well-characterised malady. One case is exactly like another, and there can be no question as to its individuality. All my dermatological friends admit this, although some—for whose judgment in this matter I have the greatest possible respect—doubt whether it ought to be called lupus. Nearly a dozen good examples of this disease have now been identified. Curiously enough the disease has not as yet, so far as I am aware, been recognised either in America or on the Continent. For the present it is a London disease only. I feel sure that it will not long remain so.

Briefly, the characters of this malady are the following: It almost always begins in childhood. I have only once known it originate in an adult. A number of little persistent vesicles arranged in a confluent group are its first stage. By an infective process, which travels probably along the lymphatic walls, it very slowly advances. The original patch grows larger, and numerous satellites are developed near to it. The patches sometimes inflame, and become covered with scab, and now and then attacks of erysipelas occur. I have several times known the patch spread until it was as large as an outspread hand, but I have never as yet seen the patches reproduced on different parts of the body. Scars are left when the process comes to an end, but I have not as yet, excepting under the influence of treatment, witnessed anything very definite in the way of spontaneous cure.

The chin, the nose, the shoulder, and the side of the trunk are the parts on which it has been observed. In the case of Dr. Tilbury Fox, and in that of Mr. Bryant, conditions precisely the same as those which I have now described occurred in connection with congenital nævi; but in not one of my own cases had anything of the nature of nævus preceded the disease. The latter, indeed, did not begin in any of them until the child was several years old. In one case, which was shown me by Mrs. Garrett Anderson, M.D., the patient was a lady of about 50, and the disease had not been present more than six or eight years. The facts, which seem to me to require that this disease should be placed in the lupus family, are the following: It begins usually in the young; it spreads by infection of continuity and contiguity; it spreads very slowly, but may in the course of time involve large areas; it leaves scars, and it is liable to erysipelas. I have, however, an item of evidence to offer which for some will perhaps be more conclusive. I mean that of the microscope.

Some sections of skin, which were cut for me by my son, showed such a large amount of cell growth in the corium that they were indistinguishable from lupus. There seems to me nothing whatever improbable in the supposition that lupus should, in some instances, infect the lymphatic system chiefly, just as it does, we well know in others, the blood-vessels or the sebaceous glands. I do not believe that in these cases the process is confined to the lymphatic vessels, but simply that they take the chief share. I may ask attention to the fact that the cure of the disease is to be effected by precisely the same remedies as those which we should employ against common lupus.

I now have to invite your attention to a very extraordinary and important case which throws, if I mistake not, a flood of light upon the life-history of lupus in general. I might place by its side several others of a somewhat similar kind, but I think we shall probably get the lesson which I think the case teaches more clearly, if for the present we restrict our attention to it. At the conclusion of the lecture I shall have the pleasure of bringing the patient before you, and may say, in anticipation, that not one of you will have the slightest hesitation in admitting that the disease in its present stage is common lupus. The poor boy is literally covered with large patches of what would formerly have been called lupus exfoliativus. On his cheeks, forehead, limbs, and penis these patches occur. Some of them are as large as the palm

of the hand, many of them show the apple-jelly growth in great perfection, and all of them are still spreading more or less at their edges. The trunk is the only part which is exempt. The case would be of interest were it only as an example of extreme multiplicity and of unusual size of patches. Its chief interest is, however, not in the present condition, but in the history of its origin, and of the mode of progress. The boy, who is four years and a half old, is, as you will see directly, apparently in excellent health. His parents are in good health; there is no history of scrofula, and there is not the slightest reason to suspect the inheritance of syphilis. The disease began by a patch on his forehead, which inflamed and ulcerated. Then in the course of a few months others developed on various parts of the limbs and face. All of these inflamed and became covered with thick scabs. In some instances the scab was heaped up in a conical form, almost amounting to rupia prominens. These conditions you will see well shown in the large portraits which I exhibit, and which represent the disease as it was at that stage. There was certainly nothing, then, which would have justified the use of the term lupus, and the boy had been under the care, before I saw him, of very skilled observers who had not used it. I ought to have said that in addition to the large patches which I have described, the whole of the back and parts of the belly were covered with an inflamed lichenoid eruption, amounting in some instances almost to small boils. I ought also to have laid especial stress on the fact that the large patches, although very numerous and almost covering the limbs, were nowhere arranged with symmetry. The treatment under which these large rupial sores healed and passed into a characteristic condition of lupus occupied about a year, and was for the most part of a very mild character. Mercury and arsenic were in the first instance pushed, and seemed to do harm rather than good. We were content afterwards to give bark and use a weak tar lotion and ointment. Under these remedies the patches skinned over, but you will note that they are still spreading serpiginously as a quiet, non-ulcerating form of lupus. The chief interest of the case seems to be in its being an example of extreme activity of the infective process in the first instance, and also in its making it probable that the early stages of lupus are those of inflammation rather than of new growth. It illustrates, also, what I have repeatedly asserted, that activity of infection-processes is greatest in the young. It is scarcely necessary to remark on the lesson which it teaches as to the paramount necessity of destroying, by the most energetic means, the initial patch when the patient is a young child. We must not wait for the disease to declare itself by unmistakable characters as lupus, but, if a young child gets an unhealthy ulceration of unusual character, caustics or escharotics must be used at once with the greatest freedom, the great danger of systemic infection being kept clearly in sight.

A case instructively illustrating these remarks has recently been under the joint care of Dr. Percival, of Northampton, and myself. Only by the most energetic measures have we succeeded in getting the original sore to heal. As in the case just recorded, the patient is a young child and apparently in excellent health. I must not, however, venture to trouble you with details.

I would call the disease which the case just narrated illustrates rupia-lupus, for the reason that it begins with all the appearances of a rupial eruption and ends by becoming definitely lupus. I am particularly anxious to assert and illustrate this transition in the case of common lupus, because it is of very frequent occurrence in the syphilitic form. Rupia always constitutes round sores, and beyond a certain and very limited extent its patches do not spread at their edges. The patches of lupus, on the contrary, are never round, but by spreading at their edges constantly tend to assume irregular forms; and in the case of syphilis crescentic often horse-shoe shapes. Now, it is by no means uncommon in the case of syphilitic rupia, beginning in the secondary stage of the disease, and being at first as well characterised as anyone could well wish to see it, for the eruption to undergo a sort of partial cure and to slide gradually from rupia into lupus. In these cases most of the patches heal, leaving the well-known shilling-like scars; whilst a few of them heal only partially and take to spreading at their edges after the manner of lupus.

Let us next glance at the pathological relationships of the curious disease which Hebra and Kaposi have described under the name of rhino-scleroma. This malady affects in the first instance the nostrils and upper lip, and is attended by great thickening of the parts. The nostrils may be plugged by a very firm and remarkably indolent growth, which ulcerates but slowly, and which resents injury but little. If you cut it or scrape it away, it quietly grows again. By slow degrees the disease may extend into the nostril, perforate the septum, and destroy the soft palate. It keeps to skin and mucous membrane, and does not involve muscle or bone. It does not cause gland disease. Its subjects are young adults. So slow is its progress, that its final stage has, as yet, scarcely been observed. Excepting in Vienna, where a series of examples of it have been recorded, rhino-scleroma would appear to be of the most extreme rarity. In this country only a single case of really typical character has been observed. It fortunately fell under the care of Dr. Payne and Dr. Semon, and was by them carefully studied, as it had indeed already been by Professor Cornil in Paris. You will have noticed in my description that this malady resembles lupus in many features. It occurs in young adults, it begins in a part liable to irritation, the outlet of the nostrils, and I might have said, it apparently sometimes is excited by the irritation of discharges; it spreads by contagion of continuity and contiguity, it keeps to skin and mucous membrane, and shows none of the more marked characteristics of malignancy. It differs from lupus in that it has no apple-jelly growth, that it occurs in one particular part only, and that it but rarely inflames or ulcerates. Finally, we have as yet no proof that it can infect the blood and produce distant growths. To come to its histological features, we have excellent data from several different sources, and the reports are, with some minor exceptions, very unanimous. Kaposi, Geber, Mikulicz, Cornil, and, lastly, Dr. Payne, agree in reporting the presence of cell-growth in the deep skin, not distinguishable from that of granulation tissue. The small round cells making up this tissue are very numerous, and are often collected around blood-vessels. A few large and peculiar cells are to be found, and in some parts the interpapillary prolongations of the Malpighian layer appeared to grow downwards, after the pattern of epithelial cancer. All these features have been observed repeatedly in lupus. It remains to be added that Frisch in Vienna, Cornil in Paris, and Dr. Payne in London, have succeeded by staining processes in proving the presence of bacilli in connection with the larger cells of rhino-scleroma. They are not those of tubercle or lupus, but "short, thick, almost ovoid bodies, often coloured at each end and colourless in the middle" (Payne).

It is very clear that rhino-scleroma differs from lupus, but by no means so certain that it is not a closely allied malady. Hebra thought it a sarcoma, Geber and Mikulicz a kind of chronic inflammation, Cornil refuses to consider it sarcoma, and Dr. Payne, agreeing with him in the main, appears inclined to class it with lupus. That it may conveniently and quite correctly be placed in this association, I cannot myself feel any doubt, and I have great confidence that the future will disclose connecting links even if such are not already on record. I may just remark that should, in certain cases, rhino-scleroma manifest more malignant tendencies, it will not on that account dissociate itself from lupus, since it is well-known that cancer is occasionally the final result of the latter. Although rhino-scleroma probably acquires part of its peculiar character from the part in which it begins, yet it will be very exceptional to what we know of other maladies if it should prove that it is absolutely restricted to the nostrile. We shall probably find that similar conditions are occasionally produced on other parts of the face at greater or less distance from the nose. Its peculiar features are slow growth, no tendency to inflame even after partial operations, and the hard, bossy induration which it causes. In a lecture which I published more than ten years ago, with the design of drawing attention to Hebra's observation of this remarkable malady, I recorded three cases more or less resembling it. In two the palate was affected, and I have since been inclined to regard them as forms of adenoma, though by no means certain that they are not like the palate-attacking form of rhino-scleroma. The third and most important of my cases was exactly like rhino-scleroma in all its features, with the exception that it began on the cheek, and did not involve the nostril. I will here repeat the particulars of this case, for I never saw any other exactly like it, and it is of great value as proof that a chronic inflammation new growth of the kind described may, after a series of years, assume some of the features of lupus.

"A young lady, Miss B., from South Wales, was placed under my care by Mr. Dukes, of Canonbury, for a bossy mass of growth in the skin of her left cheek. It did not involve the nose, nor was it quite in the upper lip, but was placed just over and external to the outer angle of the mouth. Thus it was very near to, but not actually in, the rhino-scleroma territory. Its characters were almost exactly like those described by Hebra, and its behaviour under treatment also agreed very closely. Miss B. attributed the growth to a wasp-sting some years before. The mass was almost as large as a halfpenny, abruptly defined, a quarter of an inch thick, glossy on the surface, and of reddish-brown tint. There was no ulceration. For want of a better name I called it lupus, and treated it, as I always do lupus, by free cauterisation. We used both the actual cautery and the acid nitrate of

mercury. These did little or no good. The sores we caused healed quickly, and the mass soon resumed its original state as to density, thickness, and smoothness. I next, a year later, applied a paste of chloride of zinc, and took away a thick leathery slough. A very considerable depression resulted from this, for we did it most liberally, as I was determined, if possible, to effect a cure. We were, however, again disappointed. No sooner was the sore healed than it again began to indurate, and a year later Miss B. returned to me again with the mass not so thick as formerly, but still very conspicuous. I now persuaded her to come into the London Hospital. She did so, and I put her under chloroform, and destroyed the growth very freely indeed, with the actual cautery. Her condition was much improved when she left the hospital.

"A year later (in November, 1877), I heard from Miss B. that her face was still uncured. She writes: 'The last operation did a great deal of good, for when healed the mark was quite white, with the exception of the centre, where a small red spot remained, which has since spread to the top and bottom, leaving the sides clear.' Miss B. complained that the part would flush and burn after taking food, and that, on taking the slightest cold, it became much swollen and painful. The tendency to recur is, therefore, very strongly marked.

"Now, although I called this lupus, I certainly never saw any example of lupus exactly like it. Its bossy hardness, its elevation, its freedom from ulceration, and its rapid healing and re-induration after healing, are all points in which it agrees with rhino-scleroma, and does not agree with lupus. Had it been on the nose, it would have agreed in all respects with Hebra's description."

I have quoted the above as I published it in 1879. I am now in a position to give the sequel to the case, and to say that it subsequently approached much more nearly to lupus.

Miss B., now Mrs. L., came to me in July, 1883—that is, about six years after my former treatment. I then found that the result of our deep cauterisation with the actual cautery, as described above, had been a cure so far as the central part of the growth was concerned. A soft white scar remained over the site of the former disease; but, during the last year or two, there had been spreading at the upper angle of the scar. The disease had, however, taken on a new type of growth. It was no longer bossy, thick, and smooth as at first, but presented a rough dry surface, like some varieties of lupus sebaceus. Its edge was abrupt and slightly raised; it had spread in a long irregular patch until it had almost reached the inner angle of the eye. There was no production of lupus elsewhere, with the exception of two or three other small spots, near to the margin of the scar on the lower part of the cheek. The precise form finally taken on in this case is a very exceptional condition of lupus. The patient spoke of being able to pull little roots out of it, by which she meant portions of dry epidermis, which dipped down between equally dry papillæ, like granulation growths. With this, however, there was not, and never had been, any moisture or formation of pus scab.

Everyone will recognise this description as being applicable, with the exception of the absolute dryness, to what happens in many forms of lupus on the hands and feet, and now and then on the face. The bleeding of the lupus patch, when its epidermic investment is pulled off, is a feature which has attracted the attention of all observers. Usually, however, the epidermic investment makes the surface of the patch smooth. In this case it did not do so, but left it rough and as if papillary.

There is a not uncommon form of the disease known as sycosis which is certainly nearly allied to lupus; it is locally infective, and spreads by contagion of continuity and contiguity. It destroys not only the hair-follicles, but the intervening skin; and it leaves a scar where its action comes to an end. Like lupus, it results in spontaneous cure when the tissues in which it began have been destroyed. It certainly occurs most frequently in association with evidences of struma and feeble circulation, and occasionally it results in conditions which everyone would recognise as common lupus. It is, however, quite correctly named sycosis, since it is in the beginning a suppurative inflammation of the hair-follicles, and is always restricted to hair-growing regions. As a rule this form of sycosis-lupus affects the whiskers or chin, and develops symmetrically. It is very chronic and very difficult of cure. Not infrequently it is coincident with ophthalmia tarsi, which is in fact the same disease attacking the eyelashes. It has long been recognised that ophthalmia tarsi destroys the skin around the hair-follicles and leaves a scar. In this way it frequently causes disfiguring lippitudo, and displaces the edges of the lids into a minor kind of ectropium. In very exceptional cases the hair of the scalp may be affected as well as that of the parts named. I have known the entire scalp reduced to a condition of tight scar in a patient in whom the eyelashes and whiskers were also destroyed. Sycosis of the eyelashes is common in early life and in both sexes, whilst the same affection in the face usually waits for its development until the sexual hairs have grown.

I have placed the name sycosis-lupus in my syllabus of to-day's lecture mainly as a suggestion, and I did not know that it had been previously used. I have since found, however, in a paper on lupus by Mr. J. L. Milton very similar statements to those which I have just made. Mr. Milton goes so far as to place amongst some cases of lupus which he records in detail two which were only sycosis. For myself, I do not think that we shall serve any useful clinical purpose by putting sycosis in the lupus family. It is a relative only. The features of difference may easily be pointed out. Sycosis, although it spreads by continuity and by contiguity of tissue, does not apparently infect the blood, and does not, as a rule, become multiple. It does not spread in the skin surrounding the hairy districts, but restricts itself to the latter. It is a disease of hair-follicles primarily, and of skin only secondarily. It never produces apple-jelly growth, and is seldom attended by common lupus in other parts. Lupus in all its forms is a disease of the deep skin, and not of any one of its structures; and it is capable of spreading in all regions. For these reasons I abandon the term sycosis-lupus, and also that of lupoid sycosis, given by Mr. Milton, and prefer to keep to the old name, asserting only that scar-leaving sycosis is a disease nearly allied to lupus.

I may here add that there is a syphilitic form of sycosis which approaches yet more closely to lupus. It travels over the whole beard by a crescentic spreading edge, leaving a scar behind it (the horse-shoe form). It is curable only, so far as I have seen, by liberal cauterisation of the spreading edge, just as in the case of lupus.

In advancing the opinion that Kaposi's disease is a family form of lupus, I have first to say a few words as to the characters of that disease and as to the meaning which is to be attached to the expression "family form." By the latter term, in conformity with the usage of Adams in his work on inherited tendencies, the expression is applicable to any disease which shows itself in several brothers and sisters without having existed in their parents. It is not to be applied, as might at first sight have appeared probable, to diseases such as gout, scrofula, and the like, which pass on in successive generations in the same family. Retinitis pigmentosa and ichthyosis are perhaps our best-known examples of "family" disease. If a single case of either of these be identified it may be assumed as certain, if there are several brothers and sisters, that two or three of them suffer, and that the rest are wholly exempt. Under some law of inheritance, as yet but partially understood, it would seem that part of the offspring of a certain pair derive a very definite peculiarity of structure which destines them to peculiar and remarkably uniform kinds of disease. Another proposition must be made as regards family forms. It is this: that although the disease has not occurred in preceding generations in exactly the same form, yet it would appear to have been led up to, as it were, by some other allied malady. Thus the rare disease known as xanthelasma, which is produced *de novo* in connection with jaundice, and severe liver disease, and is as such never seen excepting in adults, may now and then have its family form. When this happens, three or four brothers and sisters all show multiple xanthelasma in early childhood and without the slightest trace of the disorders of general health which attend it as an acquired disease. Probably almost all diseases have their family forms, receiving more or less of modification in this peculiar kind of transmission.

I have ventured to give the name Kaposi's disease to a malady which was described by Hebra and Kaposi conjointly under the name of xeroderma, and which has subsequently received a more or less modified designation from almost everyone who has written about it. Inasmuch as the names proposed have most of them been very unwieldy, and imply pathological statements which may or may not be quite appropriate, I put in a claim to the thanks of the profession for suggesting that this very peculiar malady should, for the present at least, be known simply by the name of the surgeon who has taken the chief share in bringing it to our knowledge. It is most certainly a family disease, being a very definite type of what we mean by that expression, and the question is as to what are its alliances. In retinitis pigmentosa we have a malady which always affects several children in the same family, and in which the nerve structures of the eye, and perhaps also of the ear, undergo a progressive degeneration, attended with the free deposit of pigment. In Kaposi's disease, making allowance for the difference between skin and retina, we have a very similar course of events. In both, the child at the time of birth appears quite healthy, and in both pigment accumulations are the first symptom of disease. In Kaposi's disease a condition of very inordinate freckles is the first stage. Next the skin shrivels, and becomes dry or even scarred. At this stage ulcerations may occur, and the alæ

nasi may be destroyed, just as they are in lupus. I have the pleasure of being able to show you, through the kindness of Dr. Radcliffe Crocker, an excellent portrait of a patient who was the subject of this malady, and I place beside it another which has been lent me by Dr. Stephen Mackenzie, showing a peculiar case of psoriasis lupus. Dr. Mackenzie's patient was undoubtedly the subject of a modification of lupus erythematosus. I ask you to note how closely similar the conditions in the two portraits are. In Kaposi's disease precisely the same parts are affected as those which suffer in lupus erythematosus. The disease begins on the face, and it next affects the hands and arms, and lastly in a slighter degree the feet and legs. There can scarcely be a doubt that the child is born with a skin so constituted that it will not wear well. In other words, that it cannot bear the ordinary exposure to wind and sun. Under these influences it first becomes pigmented and then inflames. Now this is precisely what occurs in the most severe and typical forms of lupus erythematosus. The portrait published by the New Sydenham Society may suitably remind us of one of these cases. In them the influence of exposure is only less definitely marked than in Kaposi's cases. Another feature of resemblance between the two maladies, or rather I would say an indication of alliance, is that both diseases may end in malignant action. Here, however, we have a feature of resemblance with lupus in general, rather than with lupus erythematosus in particular, for it is lupus vulgaris that is apt to fungate and pass into epithelial cancer. In Kaposi's disease, even in childhood, if the condition be severe, there is great liability to the formation of fungous excrescences, which, although often consisting of granulation tissue only, may in others run a malignant course. Thus I think you will admit that I have established my point that there are close features of resemblance between lupus and this remarkable malady. I by no means assert that they are the same disease, but simply that the one is the family form of the other, receiving, as usual in family forms, conspicuous modifications. My friend Dr. Radcliffe Crocker, in his excellent report on the disease published in the *Medico-Chirurgical Transactions*, remarks that "few will dispute that the disease is *sui generis*." This is precisely what I do dispute. Pathology knows no Melchisedecs, and if we would rightly understand the nature and origin of the various and often very peculiar maladies which come under our observation, we shall succeed better by seeking for relationships than for differences. In all probability no malady is really isolated.

I have incidentally said so much as to lupus erythematosus, that it may probably not have been noticed that I have not yet given any description of it and of its varieties. I shall be very brief on this subject, for the time now at my disposal is very short, but I must not wholly omit it. First, let me say that I think it is to be regretted that the old term lupus sebaceus has been lost sight of, and that all cases, whether what used to be called sebaceous, or those purely erythematous, are now classed under the latter name. This involves a confusion of things which present important features of difference. The earliest observations which we have as to the disease associate it with the sebaceous glands, and subsequently the same conditions were figured by Cazenave under the name of acne sebacea partielle. Yet there are forms of lupus erythematosus which are congestive only, and show no tendency to implicate the glandular system. In dealing with the histology of lupus in general, I mentioned that Geddings and Kaposi considered that lupus erythematosus began around the glands. Dr. Thin considered the blood vessels chiefly at fault, and Neumann and Jamieson the upper layers of the corium. These differences of opinion, at first startling, find, I think, a fair explanation in the fact that the disease is not always the same. Nor does it always in the same case present the same conditions at different parts or at different stages. I cannot say that I have found Kaposi's division into two forms, lupus erythematosus discoides and lupus erythematosus discretus et aggregatus, of much assistance in clinical work. The classification I would venture to suggest is the following; but, in making these subdivisions, I am well aware that many cases will have to be placed in more than one.

The first subdivision should, I think, be into lupus sebaceus and lupus erythematosus proper. In the former category I would count all cases in which there is conspicuous implication of the follicles, all in which the well-known dried orange-peel condition is seen. Many of these cases are comparatively slight, and remain for long strictly local. As Kaposi has well remarked, they rarely leave the face and head. Sometimes they, like lupus vulgaris, are non-symmetrical. Their significance as revealing symptoms is far less grave than that of the true erythematous form. Some of them have little or no erythematous congestion around the patches, but in others it may be considerable. At the other end of the chain, and in strong contrast, I would place the cases in which erythema is the conspicuous feature, and almost the sole one. In many of these there is no roughness of the surface, and the orifices of the sebaceous glands are at no stage unduly conspicuous. In these the disease often spreads rapidly, the arrangement is always symmetrical, the hands and feet are often attacked, and outbursts of febrile illness are not infrequent. Between the typically sebaceous and the typically erythematous, we have many cases which, in varying proportions, combine the peculiarities of both.

For purposes of clinical convenience I would arrange the cases of lupus erythematosus proper into groups; first of those in which the disease was restricted to the face and head; secondly, those in which the hands as well as the face were affected; thirdly, those in which the disease showed a tendency to become general, that is to extend to neck, shoulders, upper arms, and possibly to the trunk; also, fourthly, those in which erysipelas had repeatedly occurred. In our last lecture I spoke of the great danger which attaches to lupus erythematosus in its typical forms, and especially of the risk of a fatal attack of erysipelas. Kaposi's testimony on this point is very strong; indeed, he would appear to have met with erysipelas very frequently, and speaks of an "erysipelas perstans faciei," with which I am not familiar. The circumstance that he drew from the experience of a large hospital in which the patients remained for long periods, whereas my cases have been chiefly observed in private practice, may explain some discrepancies. He would be likely to encounter more serious complications than have fallen to my lot. The best published portrait of a purely erythema lupus with which I am acquainted is that in the New Sydenham Society's *Atlas*; one which I now show you, published at the Hôpital St. Louis in Paris, and designated scrofulide erythematose, is also excellent, and has the merit of being a photograph. Those given by Hebra show the sebaceous and mixed forms only.

I have yet two topics to which I must advert before I conclude. I refer to the simulations of lupus by syphilis, and the association of lupus with cancer.

A large number of the diseases of the skin in the later periods of syphilis are lupoid in character. By that statement it is meant that they occur without symmetry, that they are infective and serpiginous, and that they leave scars. In these features they differ wholly from the eruptions of the secondary period, which are symmetrical and exanthematous and show no tendency to infective spreading. A syphilitic lupus, like other forms of lupus, may spread indefinitely, and may last for years; indeed, unless cured by treatment, it will as a rule never get well. We occasionally see very severe secondary eruptions, especially those of the rupia class, gradually slide when nearly cured into lupoid peculiarities, that is, some of the patches may take on serpiginous spreading. As a rule, however, syphilitic lupus is decidedly late (that is, tertiary) in its appearance. It may simulate any of the known varieties of lupus, and the closeness of the resemblance may be most deceptive. I cannot see that anything is gained by disuse of the term lupus in connection with syphilis. If instead of it we employ such terms as horse-shoe sores, serpiginous ulceration, and the like, we lose in clearness of meaning and do not gain in anything.

Many observers have recorded cases in which cancer has developed in lupus patches, either whilst the disease was still extant or after cicatrisation had taken place. I have shown you a portrait from a case of my own in which this took place in a partially cured lupus, and several others have fallen under my notice. In three or four cases I have seen lupus and cancer in the same patient independently of each other, and on more or less distant parts. Thus it would appear that not only is the scar tissue of lupus prone to be attacked, but probably there is something in the patient's state which gives proclivity to both. The form of cancer is epithelial, but very malignant. It reappears usually very quickly after excision, and advances very rapidly. It is often attended by large fungating granulation masses, exactly such as are seen in the cancer which follows the ulcerations of Kaposi's disease. A very important addition to our knowledge of cancer in this relation has been made since these lectures were commenced. I have only to-day obtained a copy of a very able paper on Lupus-Carcinoma by Dr. Bayla, of Tübingen, published in Bruns's *Beiträge*. He has collected no fewer than forty-two cases, and in one of them it began as early as the twenty-sixth year. The paper is accompanied by four portraits, which well illustrate what I have just said as to the noteworthy tendency to fungate. These portraits I now produce for your inspection.

In conclusion, Mr. President and Gentlemen, permit me to recapitulate shortly the main arguments of my lectures. It has been sought to show that there are a large number of maladies, some of them, it is to be admitted very rare, but yet of extreme interest, which are cognate with common lupus, and that between common

lupus and lupus erythematosus there are bonds of essential relationship, whether we regard their clinical features or their histological characters. Next, it has been made probable that all forms of lupus are in occasional relationship with the state of health which gives liability to tuberculosis and to diseases of the scrofulous class; but in limitation of this it has also been proved that many lupus patients are in excellent health, and that there appears to be some proneness to cancer as well as to tubercle. That lupus begins as an inflammation under the influence of various exciting causes and derives its peculiarities from the part affected, and the special structures in that part, as well as from the age and proclivities of the patient, has also been asserted. Thus it has been sought to discredit the supposition that lupus, or any of its peculiar forms, deserves such terms as *sui generis*, the implied creed being that they are closely related amongst themselves, and also to other various pathological processes. The doctrines of infective spreading and system-contagion have been asserted as being explanatory of the phenomena of lupus, and as finding in it some of their best illustrations. The laws of hybridity and those of partnership in disease have also been appealed to, as well as those of modification in hereditary transmission, under which latter it has been attempted to establish the pedigree of the very remarkable malady known as Kaposi's disease.

I much regret that I have not had time to say anything in reference to treatment, since I might have drawn from it very important evidence in support of the conclusions placed before you. This, however, must be reserved for another occasion.

In reference to the introduction of not a few new names, and the alteration of some old ones, I am well aware that I have laid myself open to criticism, and that I have taken on me grave responsibility. My innovations in these matters, however, I willingly leave to the judgment of others. If found useful they will live, if otherwise let them die. I can only assure you that I have done nothing from caprice, but that I have honestly endeavoured, as far as my ability admitted, to make clear a very intricate subject, and to lighten the labours of those who will follow me.

LETTSOMIAN LECTURES

ON

SOME POINTS IN THE SURGERY OF THE URINARY ORGANS.

Delivered before the Medical Society of London, January, 1888.

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LECTURE II.

THE PATHOLOGY OF THE ENLARGED PROSTATE VIEWED IN RESPECT TO ITS CAUSATION AND PREVENTION, AND THE TREATMENT OF SOME COMPLICATIONS ARISING OUT OF IT.

MR. PRESIDENT AND FELLOWS,—I purpose this evening speaking of the pathology of the prostate relative to some points in connection with the prevention and treatment of certain disorders arising out of it when it becomes hypertrophied. The causes of hypertrophy of the prostate have formed the subject of much careful observation, and I feel some hesitation in again referring to them. Still, on the other hand, though my views may not prove generally acceptable, I am inclined to think that a narrative of the observations upon which they are to a large extent based may serve a useful purpose in indicating lines of thought which may result, sooner or later, through the investigations of others, in clearing up doubtful passages in the physiology and pathology of this part. In the first place I shall speak of the prostate as forming the retentive apparatus of the male bladder, under whose influence the urine is collected and held, irrespective of any glandular function which, by the nature of other structures it may contain, it is capable of exercising. And I think it will not be difficult to substantiate the proposition that, in the human species at all events, this part may with greater propriety be designated the "prostate muscle," rather than the "prostate gland," for whatever function it may exercise intermittingly, relative to the process of generation in its latter sense, seems to be subservient to the physical part it is continuously playing as a portion of the retentive apparatus. In support of such a view I would draw attention to Mr. Ellis's important paper (*Royal Medical and Chirurgical Transactions*, vol. xxii), On the Muscular Arrangements of the Genito-Urinary Apparatus, wherein it is remarked, "I would propose the name *orbicularis vel sphincter urethræ* for both the prostate and the prolongation around the membranous urethra, whilst I would confine the old term 'prostate' (without the word gland) to the thickened and more powerful part near the neck of the bladder. This orbicularis may be considered as only an advanced portion of the circular layer of the bladder, though it must have the power of acting independently of the vesical fibres." But if its muscularity is admitted, we must conclude that it for the most part exercises its function in conjunction with the bladder in the form of a hollow muscle, for it would be against the nature of things for it permanently to exist in the shrivelled and contracted state it presents after death. We have been too much accustomed to regard the prostate from its *post-mortem* aspect, that is to say, as a mass of muscle of the size and form of a chestnut, in which is contained some secreting tissue. For concluding that it thus exists during life, I believe there are no substantial grounds, as it seems to me that under no circumstances, save the rare and momentary one when the bladder is absolutely empty, does it present such an appearance. On the contrary, the muscular fibres are spread out like a funnel, with the apex downwards so as to form a strong muscular support for the bladder and its varying amount of contents, the degree of expansion being naturally relative to what the viscus may contain. Hence the action of the prostate may be said to be just as continuous as that of the heart. In reference to this important point it will be necessary that I should furnish some reasons for such a conclusion.

In the first place, the clinical examination of a healthy person with varying amounts of urine in his bladder affords no evidence that the prostate presents the contracted appearance we are accustomed to see; on the contrary, when the finger is introduced into the rectum, in the natural condition, the parts are felt to be disposed in the manner I have indicated, and providing a muscular floor for the bladder and its varying amount of contents.

But the retentive function of the prostate is more strikingly shown when we proceed to what I would speak of as actual demonstration. And for this purpose we have only to observe what follows in connection with certain surgical operations on those parts with which most of us are familiar. Incisions may be made into the male urethra, in any part of its course, as far as that point which we are accustomed to call the apex of the prostate, without any incontinence of urine following. I have seen cases of lithotomy by the median operation retain full control over the bladder during the whole period of their convalescence, in spite of the dilatation to which the prostate has been subjected by the introduction of the finger and the extraction of the stone. And this remark applies equally to cases of external urethrotomy.

When, however, the knife impinges to any appreciable extent upon the prostate, as in the lateral operation for stone and the modified median operation which I have recently drawn attention to, where the prostate is divided, from that moment incontinence takes place; the patient has no command over his urine; he can neither collect nor expel it, and in this condition he remains until the healing process has made considerable advance. We have here striking evidence, not only as to the habitual function of the prostate relative to the contents of the bladder, but that the action of the part must be unceasing in its character, subject to the circumstances under which it has to distribute its force over the area it supports or brings into action. How completely the prostate forms the lower section of the bladder was demonstrated to me in a striking manner only a few weeks ago, and in a way that I had not previously noted. It was a case of lateral lithotomy in a young man where, ten days after the operation, there was some free hæmorrhage. As the bleeding did not proceed from any part of the perineal wound, I had the patient put under ether on the operating table, and, suspecting where the bleeding came from, I introduced the nozzle of a Higginson's syringe into the orifice of the urethra, expecting that the fluid would run out of the open urethra; this it certainly did, but not until it had first entered the bladder, out of which the fluid escaped, together with some old clots which had evidently collected in the viscus, just as water would do out of the side of a cask in which a hole had been made. This I was able to see, as the wound was held open with retractors under a strong light. In addition, however, to testimony of this kind, I am convinced, from a careful examination of the prostate, both before and after operations on this part, where the introduction of the finger into the bladder formed a detail of the proceeding, that the more usual condition of the healthy prostate is one of relaxation, and not of contraction, as we are accustomed to see when death has taken place.

But further, when there are no such physical functions to perform relative to the contents of the bladder, the prostate, as a muscle, so