LUPUS ERYTHEMATOSUS.*

BY HENRY WALDO, M.D., M.R.C.P.,

Physician to the Bristol Royal Infirmary and in charge of the Department for Skin Diseases.

MR. PRESIDENT AND GENTLEMEN,—First of all I wish to thank the Society for inviting me to open a debate at this the annual meeting.

In introducing Lupus erythematosus I fear I am treading upon very difficult ground, and shall need a large amount of your forbearance.

All that we can with certainty say of what we call Lupus erythematosus is that it is a chronic inflammation of a peculiar type followed by a degeneration of the infiltrated cells, which results in an atrophy. It most commonly appears as one or more inflammatory-looking scaly patches with a sharply-defined raised border. While the patches are extending at their periphery their centres are undergoing a process of involution, for they gradually sink down and leave the skin atrophied and shrunken with a thin white scar-tissue. The follicular orifices are usually distended and filled with sebaceous material, and the scales which often cover the central part of the lesion may be seen to dip down into their openings. These appearances are sometimes only visible at or near the erythematous border, and its surface may be seen to be studded over with comedones. The patches may be symmetrical or quite irregular. When Lupus erythematosus attacks the scalp, which it frequently does, the raised erythematous edge that is so common upon the face and other parts is often absent. When Lupus erythematosus becomes generalized it spreads by multiplication of the patches, and also, as far as I have noticed, by extension of the individual ones, as in the discoid form.

This exanthematoid form of Lupus erythematosus is characterised by its symmetry, its faculty for partial or complete resolution, its

* Read at the annual meeting of the Dermatological Society of Great Britain and Ireland on May 22nd, 1901.

subacute course, and by the variety of the lesions, which give it sometimes the character of an Erythema multiforme. It may be accompanied by vesicular and bullous eruptions, fever, and severe constitutional disturbances. Besnier distinguishes several varieties of this form, one seen in young people, and relatively benign, which may disappear without leaving any appreciable atrophy; another, peculiar to adults, which is said to be acute and to result in pulmonary and renal tuberculosis. Kaposi says that in this severe acute disseminate form there may develop many hundred hæmorrhagic or clear watery vesicles, as in Herpes iris. These soon dry into crusts, and after the latter fall off characteristic efflorescences of Lupus erythematosus, with a depressed centre, are left behind. There may also be erysipeloid swelling of the face and internal complications. He says these cases remain entirely unexplained, the *post-mortem* examinations showing nothing. He has also seen the mucous membrane of the hard palate and cheeks attacked by an analogous change. I can only say in regard to these severe cases that I have never seen them. In the early stages of Lupus erythematosus the chronic inflammation appears to be exclusively confined to the small vessels of the upper and middle regions of the derma. The walls of many of the cutaneous blood-vessels are seen to be undergoing a proliferation at certain points, and in some of them an obliterating endarteritis may be observed. The upper third of the corium is filled with a dense infiltration of small round cells, which are commonly grouped along the course of the vessels. There is some infiltration in the lower portions of the corium and in the subcutaneous tissue. But there is now no doubt that the process does not start in the subcutaneous cellular tissue. These infiltrated round cells are continually undergoing a process of degeneration which affects the cells individually. The bundles of connective tissue in the area of infiltration are also progressively destroyed. The sebaceous glands are found to be hypertrophied in the early stages of the process, and their secretions correspondingly increased. After a while they participate in the cell-infiltration, become fatty and degenerated, and it is thought that they sometimes entirely disappear. The excretory outlets of the sudoriparous glands are affected in the same way. In the epidermal layers the chief alteration is one of atrophy. A pure follicular type of Lupus erythe-

matusus is exceptionally met with, without any hyperæmia except a small amount at the beginning. It is sometimes diffuse, but often forms plaques and confluent patches. The surface of these patches is rough and dry, and covered with a greyish adherent exfoliation, which dips down into the follicular orifices and exposes, when removed, a cribriform surface. Radcliffe-Crocker has described a telangiectic form of Lupus erythematosus which consists of a patch of dilated blood-vessels with some thickening of the skin, but no scaliness.

The question of the relation of Lupus vulgaris with Lupus erythematosus has been much debated; some few eminent observers hold that they are identical diseases. Histologically, the two affections are quite distinct.

In Lupus vulgaris all the histological appearances common to tuberculosis in other situations are present—namely, a granulation tissue in nodular foci, made up of small, round cells, epithelioid, and giant-cells, which undergo a central necrosis, and in which tubercle bacilli may be demonstrated.

In Lupus erythematosus the soft tubercular nodules of Lupus vulgaris are never seen, and no true giant-cells are found. The tubercle bacillus has never, as far as I know, been found, and the most careful inoculation experiments have failed to produce tuberculosis in animals.

I think it must be admitted that there are cases of Lupus vulgaris which, at any rate in their earlier stages, it is impossible to distinguish clinically from Lupus erythematosus. As an illustration of this, in Vol. XIII., No. 148 (1895) of the *Journal of Cutaneous and Genito-Urinary Diseases*, New York, a case is quoted in which the diagnosis of Lupus erythematosus had been made, but which showed on microscopic examination typical tubercular structure. And Dr. Galloway relates a very similar case in the *Practitioner* for November, 1895, of a young woman, familiar to candidates at the examination halls, in whose case the diagnosis of Lupus erythematosus was expected. After a time this patient developed enlarged lymphatic glands in the neck, which were removed and found to contain typical granulomatous tissue with large giant-cells, characteristic of tuberculosis, and leaving no doubt that the disease in the face called Lupus erythematosus was really one of Lupus vulgaris.

Lupus erythematosus is seldom, some observers say never, seen in children. Two-thirds of the cases are said to occur in females. It usually begins at or about puberty. The disease often selects the extremities and those parts where the circulation is weakest, but it has often seemed to me difficult to reconcile this with the fact that it frequently attacks the scalp, which is abundantly provided with blood-vessels. It is, however, very liable to a seborrhœic condition, and it appears to be pretty generally recognised that seborrhœa often precedes, and seems to be favourable to, the development of Lupus erythematosus.

The general health of patients with Lupus erythematosus is, as a rule, good. But the mental condition of these patients is thought by some observers to be anything but satisfactory. It is rather singular that these mental phenomena are much less often met with in Lupus vulgaris, where the deformity may be much greater.

It has been suggested that Lupus erythematosus may result from the infection of the body by the toxins of tubercle bacilli, although the bacilli themselves have never been demonstrated in this affection. From the fact that the blood-vessels are the first structures affected, and that the eruption is, as a rule, symmetrical, we should be led to think that the blood carried some poison. Brocq, who appears to be the originator of this theory, thinks that in a focus of tuberculosis toxins may be elaborated which, on absorption, produce conditions of erythema by causing vaso-motor paralysis. He also thinks there must be many other poisons which are sometimes active in producing similar symptoms, and he considers that Lupus erythematosus is intimately related to urticaria and to the common erythemata.

Brocq believes that iodoform or creosote or ichthyol is beneficial in Lupus erythematosus, because it acts upon it as an antiseptic through the blood, and that such drugs as quinine or ergot benefit it by contracting the blood-vessels and limiting the blood-supply. I have seen the most marked benefit in some of Dr. Payne's cases when he has given large doses of quinine over long periods.

It appears to me that this theory may very well explain the generalized cases of Lupus erythematosus, but it would hardly account for the localized forms which form the large majority of these cases. We occasionally see a skin-rash following a simple enema, but it extends over the whole surface, or, while perhaps most

marked over the abdomen, is pretty general. The exanthemata and allied conditions act in the same way. J. A. Fordyce and O. H. Holder (*New York Med. Record*, July 14th, 1900) seem to think, however, that the involvement of the flush area of the face which is so frequently met with in this affection can be readily explained by the slowing of the blood-current and the diminished resisting power which the paretic vessels offer to the hypothetical toxin.

Some six years ago Dr. Flemming, of Bradford-on-Avon, exhibited at one of our local medical societies at Bristol a boy, aged 8, with a disseminated form of eruption. Shortly after this he was exhibited at Mr. Hutchinson's Clinical Museum. A report of this case appears in the *Clinical Journal* for July 24th, 1895, and a very good plate illustrating the condition of the skin is published in Mr. Hutchinson's *Archives of Surgery* for January, 1897, the original drawing of which was kindly lent by him for exhibition at the meeting. The boy when first seen in December, 1894, came under treatment for a strumous abscess over the head of one tibia. At this time he had five deep red, smooth, slightly-raised patches distributed on the knee, elbow, and wrist. During the next few months the initial patches became larger, and several fresh ones appeared; when seen eight months later by Mr. Hutchinson there were from twenty to thirty such patches, varying in size from that of a threepenny-piece to that of a shilling, and distributed over the body and limbs in a fairly symmetrical manner. The abscess over the tibia had left a deep scar, and two fresh abscesses had developed, on the thigh and ankle. Mr. Hutchinson formed the opinion that the patches were *Lupus vulgaris*. Dr. Flemming followed up the case, and has kindly allowed me to bring the boy here to-day, and has supplied me with some notes. No fresh spots developed after July, 1895. The greater number of the patches showed little tendency to increase in size or to break down, and remained stationary for some time, but eventually disappeared entirely within about five years from the time when he first came under observation. Dr. Flemming examined histologically the worst spot, and found almost complete absence of the epidermis, and very considerable small-celled infiltration of the corium with long ingrowths of epithelium. In places there were little collections of small cells, but no giant-cells or tubercle bacilli were found. The treatment adopted was excision of two or three patches which

showed a tendency to excoriate, and general treatment with fresh air and extra food, principally milk.

I consider this case greatly strengthens Brocq's theory. Having had the advantage of forming an opinion from a retrospective point of view, I venture to suggest that this case was one of generalized Lupus erythematosus from the first. The scrofulous abscess was, I take it, a localized attack of tuberculosis, which acted as a focus, and from which was distributed by the blood-current the toxin of the contained bacilli, which in its turn produced the disseminated symmetrical patches. There has been a total absence of the soft nodules, likened by Mr. Hutchinson to apple jelly, which are so characteristic of Lupus vulgaris, and which tend to recur constantly during the course of that affection. And then, again, there have been no foci of necrosis (ulceration). In the generalized form of Lupus erythematosus the localized changes (cicatrization) in the skin are less severe than in the discoid form.

The weak part of Brocq's theory appears to me to lie in the fact that although localized tuberculosis is so common, yet these generalized cases of Lupus erythematosus are so very rare. Lupus erythematosus is scarcely ever seen in a boy of 8 years, yet Kaposi records a case in a child aged 3. I believe Lupus erythematosus is more nearly allied to the erythemata than to Lupus vulgaris, and of the new names suggested for it I think the one mentioned by Malcolm Morris—namely, Erythema atrophicans, is as free from objection as any. It scarcely covers all cases, as occasionally a part affected with Lupus erythematosus will clear up without leaving any tissue-change.

It is sometimes impossible to distinguish Lupus erythematosus from other conditions, and especially in an early stage. Ordinary erythema is of a brighter colour, and this imperceptibly passes into that of the normal skin, whereas the edge of Lupus erythematosus is sharply defined. The gland-structures are not interfered with, and it leaves the part in a natural condition. I find it very difficult sometimes to diagnose it from syphilis.

Kaposi says Lupus erythematosus is distinguished from the syphilide by the fact that the rim shows evidences of inflammation (redness which fades under the pressure of the finger, and oedematous infiltration), while in syphilis there is a hard, shining infiltration of the border.

Frost-bites or chilblains on the fingers, hands, face, or ears are often perplexing in diagnosis. I do not propose to discuss the various modes of treatment.

I would suggest the following order for purposes of discussion :—

- (1) The clinical and pathological features.
- (2) What is its ætiology?
- (3) Is it related to *Lupus vulgaris*?
- (4) Experiences of severe acute generalized forms described by Kaposi.
- (5) Associated mental phenomena.
- (6) Can it be always distinguished clinically?

In conclusion, gentlemen, I am much obliged to you for listening to my paper.

DISCUSSION.

Mr. PERNET said that the clinical and pathological differences between *Lupus erythematosus* and *Lupus vulgaris* were very striking. Clinically, they differed in the mode of development, distribution, age of incidence, and so forth. The speaker then went into details on these points which are matters of common knowledge. He insisted on the symmetry observed in *Lupus erythematosus*, and instanced the remarkable case brought before the Society by Dr. Abraham* in which there was a perfect butterfly pattern between the scapulæ in addition to other lesions about the body, limbs, and face. He further touched on the exceptions in both diseases. As to the scalp, he had never seen *Lupus vulgaris* occur in that situation independently. In the two or three cases he had seen in which the scalp had become involved this had taken place by extension from neighbouring parts of the face and neck. It was very rare.

Exceptionally, he had seen *Lupus erythematosus* in association with tuberculous glands of the neck, but he considered this was accidental. It did not prove an actual connection between *Lupus erythematosus* and tuberculosis. He admitted that a history of phthisis in the family of *Lupus erythematosus* patients was common.

Again, the nodules observed in *Lupus vulgaris* were not present in *Lupus erythematosus*.

On clinical grounds alone, therefore, Mr. Pernet considered there was sufficient evidence to differentiate between the two conditions. This was further confirmed by the histological differences.

As to the part played by seborrhœa mentioned by Dr. Waldo, Mr. Pernet said there was no evidence to show any causal connection existed—*i.e.*, that *Lupus erythematosus* was primarily a sebaceous process. Some of the followers of Unna in this country were “plus royalistes que le roi,” for that observer had distinctly rejected the sebaceous gland-origin theory.†

* *Brit. Journ. of Derm.*, January, 1901, p. 26.

† “Histopathology of Diseases of the Skin,” Walker’s translation, p. 1074.

With regard to the case which Dr. Waldo had so kindly brought up (Dr. Fleming's case), Mr. Pernet said he looked upon it as one of *Lupus vulgaris*. On the buttock, the speaker pointed out, there was a minute nodule near one of the scars. It did not disappear under glass pressure, and was probably a *Lupus vulgaris* nodule. As to the failure to find the bacillus in the portions of skin examined, that did not exclude *Lupus vulgaris*. Taking the age, distribution, course, &c., he concluded in favour of *Lupus vulgaris* as against *Lupus erythematosus*.

In answer to the questions Dr. Waldo had asked the Society to decide upon, Mr. Pernet expressed the decided opinion that *Lupus vulgaris* and *Lupus erythematosus* were two distinct diseases. There was no evidence that the latter was due to the bacillus tuberculosis. As to the ætiology, they were still in the dark on that point. He had not had much personal experience of the severe generalized forms. He had had an opportunity of seeing a case under Dr. Abraham at the West London Hospital* in which acute generalization occurred. The patient had albuminuria and rapidly failed in health.

Dr. Waldo had not stated what kind of mental phenomena he referred to. Mr. Pernet had not noticed anything special in the way of insanity, &c., in *Lupus erythematosus* patients.

Mr. Pernet was of opinion that with care, and taking all the facts of the case into consideration, *Lupus erythematosus* could practically always be clinically distinguished from *Lupus vulgaris*.

Dr. Stowers said the Society was very much indebted to Dr. Waldo for his paper, and for bringing up the patient whom he had exhibited. He was inclined to disagree with the view as to the spot on the boy's buttock, as he did not think it characteristic of *Lupus vulgaris*, but it was so small that it was difficult to come to a conclusion.

With regard to the points mapped out for discussion, in the first place could *Lupus erythematosus* always be distinguished clinically? There were cases in the earliest stages of both diseases in which it would be impossible to form a reliable opinion. There were various degrees of erythema of the skin, somewhat persistent, which were not attended with any new growth, of the nature of erythematous *Lupus*. It was not infrequent to find, after exposure, as on the river during the boating season, erythematous patches having the appearance of ordinary sunburn, and yet when carefully watched for three or four weeks changes could be seen which were indicative of a disease which could not be recognised by one single observation. The best diagnoses were probably those founded upon many points, and not upon any single one. He believed it to be exceedingly difficult sometimes to come to a conclusion as to the nature of those ill-marked disorders in the early stages. An element in the predisposition to disease which was often overlooked was the temperament not only of the patient, but of the skin itself. There was a tendency to make treatment too exclusively local.

He had not noticed any mental conditions in association with either of those two diseases.

With regard to the relation of *Lupus erythematosus* to *Lupus vulgaris*, he called attention to an annotation by Dr. Bunch, in a recent number of the *Dermatological Journal*, in which the alleged relationship between tuberculosis of the skin and erythematous *Lupus* was discussed. The conclusion was that the two disorders

* *West London Med. Journ.*, Vol. V., No. 3, 1900, p. 212.

were perfectly distinct. The true nature of erythematous Lupus had not yet been explained, but no specific organism had been demonstrated in connection with it.

He had hoped that Dr. Waldo would have referred to the treatment of the disease, because that was the practical lesson members had come to learn. But probably Dr. Waldo would follow up the subject another time, when he would speak of treatment.

He wished to ask whether Dr. Waldo had seen or had known of a case in which erythematous Lupus had been associated with carcinomatous disease.

He concluded by formally proposing a hearty vote of thanks to Dr. Waldo for his paper, and for the observations he had made in it, as well as for his kindness in bringing up the patient. The remarks which Dr. Waldo had made were worthy of the most careful consideration.

The PRESIDENT said he came to the meeting prepared to be converted, if that were possible, but he still looked upon those two conditions—Lupus erythematosus and Lupus vulgaris—as very much a question of degree. The discussion had not removed that feeling. So many of the cases of Lupus erythematosus which he had watched over a series of years had developed into Lupus vulgaris that he could not dispel from his mind the impression he had mentioned. Some cases might never go beyond a passive condition, just as tuberculosis of the lung might remain very slight and might eventually heal. Other cases of similar nature at the commencement might advance rapidly. Mr. Pernet said he had never seen Lupus vulgaris affecting the scalp only, but he (Dr. Harrison) had such a case now under his care, and which he hoped to show some time to the Society. It healed, and then ulcerated, and had all the characters of Lupus vulgaris.

Dr. PHILLIPS-CONN also took part in the discussion.

The vote of thanks to Dr. Waldo was carried with acclamation.

Dr. WALDO briefly replied, expressing his gratification at the way in which the paper had been discussed.

In reply to Dr. Stowers, he said he had no experience of carcinoma in connection with Lupus erythematosus.

SOCIETY INTELLIGENCE.

DERMATOLOGICAL SOCIETY OF LONDON.

A MEETING of this Society was held on the 10th July, 1901, Dr. PRINGLE in the Chair.

Drs. GALLOWAY and MacLEOD showed (1) microscopic preparations from the case of *Hyperkeratosis eccentrica* presented at the last meeting of the Society. The histological structure was characterized by an extraordinary increase of the horny epithelium along the elevated and circinate margin of the eruption. The epithelium, increased in amount, was fairly well cornified, though not perfectly