CLINICAL LECTURE

ON

THE IMPORTANCE OF THE DIAGNOSIS
BETWEEN LEUCODERMA AND
WHITE LEPROSY.

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[Concluded from page 404 of last number.]

THUS, then, gentlemen, I think we have made it sufficiently plain that there exists in India a skin-malady which is identical with what we know here as leucoderma, but which is confounded by many observers with true leprosy. Most of the quotations which I have brought before you show an acquaintance with the points of diagnosis, but some do not. Thus Dr. Carter of Bombay, who is himself perfectly aware of the great difference, writes: "The first and the second are commonly confounded under the term 'white leprosy.'" The first and second to which Dr. Carter refers are respectively anæsthetic leprosy and leucoderma. We find some observers styling leucoderma "benign leprosy"; others record that it is much slower in progress than the other forms, and tell us, with some apparent surprise, that they have known its subjects remain for several years without constitutional symptoms being developed. We assert that leucoderma is utterly and permanently distinct from leprosy, and that it never passes into the latter malady; and that if, as must be expected, the two are now and then met with together, their concurrence is an accident only. In reference to this assertion, that leucoderma is not even an ally of leprosy—not even remotely connected with the same cause—many facts might be mentioned. I have already referred to the differences which the two diseases present, to be reminded of which you have but to look again at our patient, or at the portraits which I now show you. In leucoderma we have the dead white patch so abruptly margined, and so entirely free from other peculiarities, possessing the same degree of sensation as other parts, continuing supple, soft, and free from either swelling or desquamation; whilst in true white leprosy all these conditions are altered. For the sake of contrast, I now show you a portrait of a leprosy patient in whom the white patches as closely resembled those of leucoderma as in any case that I have seen. Many of you have had opportunities of seeing leprosy patients for yourselves, for we have had several under care within the last few years. The man from whose thigh the portrait I now show was taken was the subject of the mixed form. On his face the leprosy was tubercular, and on his body and limbs there were numerous white anæsthetic patches. This coexistence of the two forms, as they are called, is very common. I have seen it scores of times in Norway; and it is acknowledged there and elsewhere by all competent observers. Perhaps instead of calling them two forms, we ought rather to consider the two conditions as different symptoms of the same malady. The man whose condition is shown in our sketch was not a native of a leprosy district, and his case will serve well to illustrate the importance of the subject under our discussion. If we are ever to arrive at a knowledge of the true cause of leprosy—and I am very sanguine that we have already hit upon it—we must be most careful to remove all sources of fallacy; and of these, none are more treacherous than errors in diagnosis. It is clear that if a number of maladies are jumbled up together, some of which have no real relation with each other, that our search for a common cause must of necessity be hopeless. There are few problems of deeper interest, or which are more certain to rivet the attention of those who engage in it, than the search after the cause of leprosy. It is a wonderful malady; and of late years our facts concerning it have greatly increased in number; and—thanks to the labours of many, and to none more heartily than to Drs. Danielsen, Boeck, and Bidentkap, in Norway, and Dr. Carter in India—they have also greatly improved in precision. If we have not got it yet, we are at any rate approaching the solution.

Let me tell you a few facts as to the man whose portrait I have exhibited. He was a Scotch sea-captain, aged nearly sixty, who came under my observation in one of Mr. Adams' wards in the London Hospital. Excepting the special disease from which he suffered, he appeared to be in good health, being active and energetic. His voice was rough and hoarse. His face was covered with thick bossy folds of dusky and

indurated integument, between which the skin was thin and pale. On his arms were very large patches of bluish-white skin decidedly thinned, and in most places quite without sensation. Between these patches the skin was raised, thickened, hot, hyperæsthetic, and of a dusky-livid colour. He complained much of "numbness and pins and needles" in his hands and feet; and the skin of these parts—especially that of the fingers and toes—was much thickened, and thrown into folds. These raised patches and folds of skin could scarcely be described as tubercles, either on his face and hands; those on his face rather resembled gigantic papules. The state of the skin on his left thigh is well illustrated in the coloured portrait which I have shown you. It was very similar to that of the skin of his upper arms. The white anæsthetic portions made up the larger half of the surface; their borders were always convex, showing that they were aggressive. *On these he could not feel when a pin was thrust into the skin. Between them the skin was thickened, and of a brownish-purple, being also exceedingly tender.* The commencement of the change to the white condition appeared to be very gradual. On one occasion, whilst testing his power of sensation, I touched with the compass-points a part on the upper region of the thigh, which I believed to be yet normal; but, to my surprise, he said he could not feel. On looking more carefully, I found that it was decidedly white, and had an indistinct margin; but the change was so slight, that it might easily have escaped notice. There was no doubt about it when once seen, and I demonstrated it to several students who were present. The man stated that the disease had begun about a year and a half before. He had for nearly thirty years sailed regularly to and from Barbadoes. His custom was to remain there about six weeks each voyage. During his stay there he always lived in his ship. He could not suggest any clue to its cause. He averred that he had never drunk spirits immoderately, nor ever suffered from syphilis. He was married, but had no family. He considered himself in excellent health when the disease began, and indeed should be so still, "if he could only get rid of the pain and numbness in his skin." His muscular force appeared to be fairly good. He had no bullæ, nor any scabs.

You will notice especially the numbness of the patches in this case, and the hyperæsthetic condition of their margins. You will observe, also, that the intervening integument was dusky rather than of the red-brown which is usual in leucoderma; and that there was distinct difference in elevation between the white parts and the brown parts. This difference is never observed in leucoderma, the skin being neither swollen nor atrophied.

In conclusion of our lecture, let me say a few words as to my reasons for bringing this somewhat out-of-the-way subject before you. In connexion with the case which I have detailed, I was led to speculate as to the probable cause of the man's malady, that malady being typical leprosy. It could not have been induced in him by any hereditary tendency, for he had been born in a country in which, during modern times, leprosy is unknown. It could not have been exposure to cold and hardship, for the simple reason that none whatever had occurred. It could not have been the result of the slow influence of poor diet, for the man had always been able to get what he liked, had lived well, and considered that he had enjoyed excellent health. It was improbable that it was in connexion with any specific malady, such as syphilis, our evidence on this point being that the observers living in leprosy districts have been quite unable to identify any such malady. That syphilis itself is not the cause of leprosy, it is scarcely necessary to assert to anyone conversant with English practice. You will observe that the man had been repeatedly into a leprosy district, he had been backwards and forwards to Barbadoes; and in the West Indies leprosy is endemic and prevalent. It appeared to me highly probable that he had partaken unwittingly during his frequent visits of some poisonous kind of food. I puzzled over the matter, and could think of no other explanation that would fit all the facts of his case. Following up this thread, and keeping in mind the general fact that leprosy is limited to the sea-board, and that when it occurs inland it usually follows rivers, I could not help suspecting that this poisonous food was some product of water. That the cause is not in the air of the affected districts is made almost certain by the fact that, in places where leprosy prevails most severely, the Bergenstift of Norway for instance, only certain classes of the inhabitants suffer. All breathe the same air, but all do not partake of precisely the same food. My suspicions as to the cause really being in connexion with some poisonous kind of fish gained in strength, more especially from what I saw in Norway during a visit last year. In examining the evidence recorded by observers in India, Madagascar, etc., I encountered, to my disappointment, repeated statements as to the frequency and prevalence of leprosy in inland positions, and now and then with the specific statement that its subjects had not been fish-eaters. When we find, however, that the statistics of the prevalence of leprosy have included cases of leucoderma, (and especially is this the case wherever reports

are based upon the statements of natives), we feel compelled to allow a considerable margin for errors in diagnosis. My impression is, that in India this source of fallacy has attained very large dimensions, and that many of the statistical statements on record are wholly devoid of value. In Norway, and in colder countries, leucoderma is an inconspicuous malady, and never attracts popular attention, hence it is never, even by the untrained, confused with leprosy. In hot climates, as we have seen, it not only becomes very conspicuous, but the blanched portions of integument, being less able to resist the influence of the sun, are liable to vesicate and to show conditions which further favour error in diagnosis.

Although the confusion of leucoderma with leprosy is, I believe, one of the errors which had led to the statements by writers that the latter disease prevails amongst people who are not fish-eaters, yet I suspect that it is only one of several sources of fallacy. Probably other diseases besides leucoderma are still counted with leprosy by untrained observers; probably, also, the statement as to the absence of fish as an article of diet has been made in many instances on vague and insufficient evidence. My suspicion is that different fish vary much in their poisonous qualities, and it is well known in hot climates that some fish are poisonous at one season of the year and wholesome at another. We may then, I think, without any violence to probability, believe that under some conditions small quantities of special kinds of fish may be able to produce effects for which, under other circumstances, a long continued and almost exclusively fish-diet may be requisite. Very probably also some of the forms of salted fish in common use in India and elsewhere may be much more poisonous than the fresh article, and thus it may come to pass that leprosy may in exceptional cases be found in populations living at a distance from either rivers or sea. It is these apparent exceptions which now require careful investigation; very possibly some of you may, in the future, have opportunities for throwing light upon them. I have endeavoured, in this lecture, to explain clearly one of the chief risks of error, and I hope that you will see in the importance and interest of the subject a sufficient excuse for my having brought it before you.

HYDROTHERAPEUTICS: THE RESOURCES OF HARROGATE SPECIALLY CONSIDERED.*

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LIKE dietetics, hydrotherapeutics has received too little attention from the great majority of the profession. Both were, it may be still are, rarely mentioned in the class-room; consequently we need not wonder at the ignorance displayed, especially by the young practitioner, regarding the value of water in the treatment of disease on the one hand, or the advantages to be derived in furthering its cure, by attention to such every-day requisites as food and drink, on the other. There is not a doubt about it; ignorance in these matters has led honest, earnest men, not only to neglect the use of such simple measures, but, what is quite as bad, to form unjust and harsh opinions as to the motives actuating men as honest and earnest as themselves, who have studied hydrotherapeutics or made diet a speciality. Fortunately, old prejudices are rapidly giving way; the indiscriminate use of drugs is gradually becoming less the rule, and, as far as the public, or rather the patient, is concerned, their habitual prescription less a necessity. Hence, there is a decided disposition on the part of the thoughtful practitioner to base his treatment on principles having science instead of routine for their foundation, simplicity rather than complexity as their characteristic.

As to the history of hydrotherapeutics, let me call attention to two facts, its antiquity and its universality.

1. Its Antiquity. From the days of Hippocrates, throughout the middle ages, to our own time, the use of water in its simple, pure, medicated, or mineralised condition, internally or externally, has been advocated by some of the most enlightened professors of our art, and prescribed by them for the relief or cure of the very same affections which are now allowed to derive most benefit from its use; namely, diseases of a truly chronic character, having their origin in imperfect oxidation of the tissues, or faulty digestion and assimilation; such as scrofula, gout, rheumatism, gravel, dyspepsia, hepatic, and cutaneous affections—for the most part disorders depending on the presence and retention of certain impurities in the body, which water, in common with other means, is capable of removing by reason of its mechanical and chemical properties.

2. The Universality of Hydrotherapeutics. In all countries, baths and mineral wells have been resorted to from time immemorial. Among the ancient Egyptians, Jews, Grecians, and Romans, the former held a

high place among their most religious observances, and, doubtless, had as wholesome an influence on the bodies as on the souls of the worshippers. Russians, Germans, Mahomedans, and Turks, were as great patrons of their national baths hundreds of years ago as they are to day, and have consistently and perseveringly looked upon them as important agents in the preservation of health and removal of disease. Men of every clime and condition have exhibited faith in the curative power of natural waters, and have sought them irrespectively of trouble or cost, in order that by their means they might get rid of their ailments. The virtues, therefore, of hydropathy, as it has been stupidly called, are no recent discovery, although its scientific application to the treatment of disease, especially in this country, is of yesterday. Unfortunately for its success, its advocates overshot their mark, brought suspicion on themselves and failure to their system, simply because they were utopian. They proclaimed water to be the perfect cure for all diseases—theirself the very Priests of the Temple of Hygieia, where alone the sick might wash and be whole. Admitting that there was, that there still is, not a little exaggeration, not a little quackery in all this, are we, ought we, to reject the good in a system on account of the loud vulgar style in which it is advertised? Would it not be better and wiser to search for the wheat and separate it from the chaff, and so bring hydrotherapeutics within the field of rational medicine, using water with the same judgment we exercise in prescribing everything else? The great difficulty in doing so is to find the time and appliances necessary for the effectual carrying out this mode of treatment, as well as in making the patient conform to our wishes; hence, it is far better to send those who can afford it to a regular hydrotherapeutic establishment, under the care of a physician who has made this branch his special study: many eminent practitioners are in the habit of doing so, and assuredly this would be the most certain way of divesting hydrotherapeutics of much that is objectionable in its practice. The specialist would then naturally look to the profession, not to the public, for patronage, and would endeavour to supplement, not supplant, the regular attendant in the treatment of the patient. Where the patient has neither the time nor the money to enable him to procure the advantages of such a course, I wish to make it clear that it is possible to bring within his reach a wet compress, a sponge, shallow, or sitz bath, dripping sheet, or wet pack; and if with these you combine the drinking of pure water, in known quantities, and at stated intervals, with friction, exercise, and diet, you will sometimes place him under the most favourable conditions for the restoration of health.

There are two classes of patients who to me seem peculiarly fitted for this kind of treatment. The one suffers from chronic plethora, with great inactivity of the glandular system, and consequent derangement of the functions of secretion and excretion; the other labours under no very visible signs of disease, but complains of general inaptitude for business or pleasure, accompanied with great depression of spirit—a state in all probability having its origin in exhaustion or irritation of the ganglionic system. These cases (as most medical men too well know, if they do not admit it) do not respond to ordinary treatment, and frequently exhibit symptoms of improvement when sent away for change of air and scene; and they more especially do so when, with this change, they are subjected to a judicious course of hydrotherapeutic treatment. I cannot enter more fully into this matter, and shall only add that water is capable of being applied in the most opposite methods, with the most satisfactory results; that in it we have one of the most powerful means of acting at will, directly or indirectly, on the capillaries, thereby regulating the circulation and temperature of the body—no mean desiderata in the management of disease; and that its value and readiness of application cannot be too prominently brought before the profession, in order that it may become better known and more frequently resorted to in ordinary practice.

Before speaking of the waters of Harrogate, I must say a few words on its topography.

Standing on high table-land, about four hundred feet above the sea, midway between the east and west coasts, many miles removed from the contaminating influences of public works and stagnant waters, with ready surface-drainage, and destitute of trees, it commands two most important essentials to the healthiness of a locality—dryness of soil, and a constant change of pure bracing air. It may, therefore, be fairly classed among those highland districts where, by reason of a rarefied condition of atmosphere, greater amount of ozone, or freedom from impurities, oxidation of the animal tissues is more perfectly, more rapidly effected. The functions of the body are quickened; and the demand for new material, to replace the old used up atoms of the individual, is stimulated. The appetite is thereby sharpened, and the capacity for bodily exercise augmented. Change to such a place is, in many instances, all that the invalid or convalescent requires, and proves abundantly sufficient for the wants of those who stand in need of nothing but change. This I have observed especially the case with patients

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