CLINICAL REMARKS

ON

THE STUDY AND DIAGNOSIS OF SKIN-DISEASES.

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IN the following remarks on the best method of observing diseases of the skin, I would point out, in the first place, that the diagnosis of a disease, to be of any practical value, includes much more than assigning to it a name: it involves a correct estimate both of its nature and of its affinities. The great majority of skin-affections are forms of inflammation, and as such are very much alike as regards details, though they may differ altogether in other important respects. Thus, in almost all inflammations of the skin we may chance to find red patches, papules, vesicles, blebs, pustules, scales, or crusts; and, therefore, the first point of importance is the recognition of the fact that these varying phenomena of cutaneous inflammation are simply brought about by the anatomical structure of the skin, and are, therefore, of uncertain value in determining the nature of the inflammation. The extent and degree of the inflammation, the tissue involved, the grouping of the eruption, and the part affected, may all be of more importance than the minute characters of the elementary changes. But, although I wish at the outset to guard against an overestimate of the diagnostic value of minute characteristics, I nevertheless attach considerable importance to them, especially in certain cases, as I shall hereafter explain.

"For the recognition of a disease of the skin", says Hebra, "no other assistance is required than a knowledge of the objective symptoms, which are visible on the surface of the body in each particular case. We do not attach any value whatever either to the history or to the subjective phenomena in investigating a cutaneous affection, for we ought to be guided in this matter only by those symptoms which are appreciable by the sight, the touch, or sometimes by the smell. These afford certain and infallible grounds for the establishment of a diagnosis, for they have their origin in the malady itself. They are, so to speak, the alphabet of which the letters are traced on the skin; and our task is but that of deciphering the writing."

This statement of Hebra, that we do not attach any value whatever either to the history or to the subjective phenomena in investigating a cutaneous affection, must be received with reservation. It is, however, valuable, inasmuch as it tends to impress strongly and, as it were, to exaggerate the leading feature in our means of diagnosis. On the other hand, though an expert of Hebra's experience may possibly dispense with the aid of history and subjective sensations, yet few will doubt that in ordinary practice the history of a case may be of great use in enabling us to arrive at a correct diagnosis. For example, scabies in children is sometimes masked by an unusually copious eruption of eczema. If, however, in a doubtful case, we learn that several members of a family are coincidentally suffering from a similar affection, there will be presumptive evidence that the disease is scabies. No doubt the answer to this is, that we have the means of proving positively the nature of the malady by demonstrating the presence of the acarus. Yes; but this mode of proof is not always convenient, and in some cases where treatment has been already commenced, not even possible. In such a case, the history may be of great diagnostic value. Again, even the "subjective phenomena" are useful in determining the nature of a skin-affection. We have not unfrequently to deal with mild cases of intermittent urticaria, an affection which is often of such a transitory nature that the wheals and even the irritability of the skin may have vanished at the very time when the patient presents himself for examination, and consequently we have to draw our conclusions from the history and the subjective sensations of burning and itching described by the sufferer. I have said enough, however, for the present, to show that Hebra's dictum must not be pressed too closely in actual practice.

1. In order to make a successful examination of a patient suffering from skin-diseases, it is very necessary to have some systematic method of procedure. The rule of the first importance in all cases is, to examine the different parts of the body on which any eruption is present. For this purpose, it is not generally necessary to expose a large cutaneous

surface at one and the same time. The parts of the body should be examined in succession, and the state of each noted at the time of examination. The importance of this rule can scarcely be overestimated; indeed, in some cases, it is almost essential to a correct diagnosis. Everyone is acquainted with the fact that dermato-syphilis may be present in no less than five or six different forms of eruption in one and the same individual; and further—and this is the point—some of these forms may be highly characteristic, while others would hardly serve as means of diagnosis. Under these circumstances, a partial examination might lead to grave error and entail an unsuccessful course of treatment.

II. In conducting an examination, the following points should be kept in mind. Our object is, in the first instance, to take a general view of the efflorescence as a whole, irrespectively of the particular elementary forms of eruption present (vesicular, papular, etc.) We do this almost instinctively, and comprehend at a glance the importance of combination and arrangement, or in other words, that this or that elementary lesion, taken singly, does not constitute the skin-disease. Thus, when we speak of a vesicular, papular, pustular, or squamous skin-disease, we convey but a very imperfect idea of its nature. The parts of the body affected, the tissues involved, the form, arrangement, and grouping of the eruption, the degree of inflammation, and many other points, are often of more importance than the minute anatomical details. The mode, then, of speaking of skin-diseases as papular, vesicular, or pustular, must be regarded as an abridged form only, and analogous to shorthand writing.

Having, however, in the first instance, regarded the skin-disease as a whole, we may proceed, in the second place, to take cognisance of those separate parts which, combined, constitute the affection; or in other words, we may, as it were, dissect the eruption into its component elements.

1. In any given case under observation, we must distinguish what is essential from what is non-essential or accidental; what belongs to the original affection from what has been superadded; and we should select for especial examination those portions of the skin in which the disease is least complicated. For example, in order to demonstrate the presence of the itch-acarus, we do not choose a part of the body that is thickly covered with eczema, but we endeavour to find it in a patch of soft skin nearly free from secondary inflammation. Endless examples might be given of the modifications that skin-diseases undergo from being complicated with such common inflammations as eczema and urticaria, or even from the excoriations produced by constant scratching or injudicious treatment; but enough has been said on this point to suggest the necessity of care in distinguishing the essential from the accidental.

2. We should note the extent to which the anatomical elements of the skin are affected; whether, for example, the disease is merely confined to the cuticular layer, or whether the true skin is also involved; whether the hairs or sebaceous glands are affected; whether there are any alterations in pigmentation and colour. The importance of these inquiries is evident, as they lead us to determine by observation the original anatomical seat of the disease and the extent to which the neighbouring tissues are implicated. In order to ascertain these points, it is necessary to be acquainted with the character of healthy skin—that it is soft, smooth, elastic, and slightly greasy—that great differences in thickness and colour may be natural and compatible with perfect health; that the smoothness and texture of healthy skin vary greatly in different parts of the body, being generally thicker and rougher on the exposed sides than on the flexures or inner aspect of the limbs; that certain variations in the growth, colour, and texture of the hair, as well as of the skin, depend upon the age, sex, or race of the individual, and may be regarded as normal rather than pathological.

Bearing in mind, then, the conditions of healthy skin, we are in a position to examine in detail the abnormal changes in its various component parts.

a. In investigating the condition of the epidermis, it is easy to see whether the surface is unusually roughed, cracked, dry, or scaly; whether it is thickened by the accumulation of epithelium, as in psoriasis, or abnormally thin and transparent, or whether its outer layers are raised by the formation of blisters, vesicles, or pustules. By the aid of a common magnifying glass, we can further determine the state of the orifices of the follicles, whether they are plugged with sebum, as in comedones, or pouring out an abnormal quantity of oily secretion, as in some forms of stearrhoea. And lastly, we may observe whether papules exist, formed either from the hair follicles, or by enlargement of the existing papillæ of the skin.

b. Any alterations in the true skin will also demand our attention; and here the hand may often aid the eye in the process of investigation. The tense and brawny feeling due to excessive infiltration is

better determined by touch than by sight. Again, in furuncular diseases the extent to which the inflammation involves the deeper tissues may be often more easily felt than seen.

c. Our attention should also be directed to the colour of the skin. Divergence from the normal hue may be due to an altered degree of vascularity, to hæmorrhage, irregular pigmentation, jaundice, or other causes. If redness be the result of increased vascularity, it will disappear for the moment under pressure of the finger, as in urticaria. If, on the other hand, the colour be due to hæmorrhage, it will be unaffected by pressure, as in purpura or a bruise; and in this case we further note the various changes which the hæmorrhagic patch undergoes, from different shades of red and purple to green and yellow, until it finally fades away entirely. Pigment-spots do not undergo rapid changes; moreover, the colour is generally some shade of brown, while the absence of pigment is marked by perfectly white patches. Alterations in pigmentation are especially common in dermatosyphilis, elephantiasis Græcorum, chronic eczema, psoriasis, prurigo, and alopecia areata; while, in some leucodermic affections, an irregular or defective pigmentation constitutes the whole disease. In determining the degree and kind of changes met with in pigmentation, some care is required. The extremely dark skin natural to some people may lead us into the error of supposing that the development of pigment is abnormal, while in leucodermic and allied affections we may easily be deceived by the effect of contrast. The skin around a white patch always appears darker than it really is; on the other hand, we must not forget that there is sometimes a true abnormal accumulation of pigment in the neighbourhood of leucoderma. Again, the deficiency of colouring matter in a patch of skin affected with alopecia areata might escape observation, though every one would notice the light colour of the hairs first reproduced.

d. In affections of the beard, scalp, etc., it may be necessary to make an examination of the hair, both shaft and root. By extracting one or two with a pair of forceps, we determine at once whether the force required for their removal is less than in health, and also whether the hair itself is abnormally brittle, as in common ringworm. Subsequently, we may examine one of the hairs under the microscope, first without and then with a little liquor potassæ, which renders it more transparent; we shall thus be able to note any change or abnormal growth in the structure of the hair and its bulb. This is especially important in dealing with doubtful cases of tinea tonsurans or favus.

In most affections of the skin and hair, some cutaneous regions may be found in a healthy condition, and we must use these for comparison with the unhealthy parts, just as in diseases of the lungs we are in the habit of comparing the sound with the unsound side of the body, or as we compare a shortened limb with its fellow of the opposite side.

3. The form or shape of the patches of eruption must be next considered. In order to impress the importance of this point, it will only be necessary to illustrate it by examples. In syphilis, the prevailing shapes assumed by the eruptions and ulcerations are circular, horseshoe, and gyrate. In ringworm, the original patches are circular. Zoster follows the course of particular nerves, hence its characteristic forms. Gutta rosea and erythematous lupus are often butterfly-shaped; the patches of erythema nodosum are rounded or oval and tumid. Many other examples might be given, but enough has been said to call attention to the fact abovementioned, and to indicate its possible value in diagnosis.

Hitherto, I have considered only the component parts and forms of separate patches of eruption, complete in themselves, but occupying, it may be, circumscribed areas. It is often, however, necessary to extend our field of observation and compare or contrast eruptions of one or more kinds met with at the same time in different parts of the body. As I have before stated, the coincident appearance of different kinds of cutaneous eruption in one and the same individual is one of the characteristics of syphilis.

III. I pass on to consider, in the next place, the subject of locality and its bearings on diagnosis. Some skin-affections are strictly local, not only in contradistinction to general, but also as being located in certain regions of the body only. As a rule, when eruptions appear on various parts of the body at the same time, we may suspect either a constitutional tendency to the malady or a specific poison pervading the system. The efflorescence of fevers and syphilis is an example of the latter; that of psoriasis and eczema of the former. Some diseases, however, are invariably confined to certain localities, as, for example, acne rosacea to the head and neck, sycosis to the hairy parts of the face. Other affections never invade certain regions; thus, scabies in adults is never present on the face or scalp, or acne on the soles or palms. By a process of exclusion, then, we should never apply the term acne rosacea to a red patch situated on the thigh, or call an eruption on

the face scabies. Other skin-affections, while they are not strictly confined to one locality, yet have a marked preference (if I may use the expression) for certain regions. For example, erythema nodosum is common on the legs, acne on the face and shoulders, pityriasis versicolor on the trunk, lupus on the face, lepra on the extensor sides of the elbows and below the knees, alopecia areata on the scalp and eyebrows; to these many more might be added. Let us take an example in point; if we meet with an eruption, say on the soles of the feet, we know at once that it is either scabies or eczema (probably dry and cracked, and often mis-called psoriasis) or dermatosyphilis, for these are the only diseases (with rare exceptions) that affect the soles. The conclusions I would draw from these remarks is, that the locality of the eruption is an element of importance in our diagnosis.

IV. Hitherto I have dealt exclusively with those phenomena in skin-affections which are at once appreciable by our senses of sight and touch; namely, the character of the eruption, the tissues involved, the degree of inflammation, the shape of the patches, and the regions affected. These are all patent to our observation; and for these observations and the conclusions to be drawn from them we are exclusively responsible. There are, however, other means of diagnosis, less perfect in their nature, and less under our immediate cognisance. I refer to the subjective sensations of the patient himself. The more important of these are sensations of itching, burning or tingling, and darting neuralgic pains. With regard to the first of these—namely, itching—we are not dependent entirely on the statement of our patient. On the contrary, we may often determine the presence of itching by the well-known marks produced from scratching; and the study of these marks affords a not unimportant field of observation, for some skin-diseases derive their most characteristic features from being scratched. For example, prurigo from pediculi consists of a papular eruption which would often escape observation—does, indeed, in the paralysed—if the process of scratching did not remove the tops of the papules and lead to a slight hæmorrhage. It is the little spots of coagulated blood which especially attract our attention, and give to the disease its most striking and distinctive feature. Sensations of burning and tingling are characteristic of all forms of urticaria and allied affections, and are present also in gutta rosea; while acute neuralgic pains are often attendant upon zoster, and are occasionally met with in alopecia areata and urticaria. The traces of scratching are often, as I have said, very characteristic. In prurigo, scabies, and eczema, we have excoriations and little hæmorrhages produced on the surface of the skin; in urticaria, long red wheals or striæ; while in chronic affections of all kinds, attended with severe pruritus, we find an augmentation of cutaneous pigment, the result of the constant stimulation by scratching. To illustrate the importance of these signs as a means of diagnosis, it is only necessary to remember that, where they are present, we at once conclude that we have probably to deal with one of the following diseases; namely, scabies, eczema, lichen, urticaria or its allies, and prurigo or morbus pedicularis. The sensations of burning and smarting do not lead to any changes in the appearance of the skin, and consequently we depend for our information entirely on the statements of our patient.

V. We all recognise the importance of the history of a case in our ordinary diagnosis of disease; but it is not so obvious that, in dealing with skin-diseases, the same rule applies, and that we require to know the history before we can arrive at a complete diagnosis. Now, if the problem were merely to give a name to any particular skin-disease before us, it may be granted that this can be done without inquiry into the antecedents of the case; but if in a correct diagnosis we include, as we ought to do, something more than this, if we take into consideration all the facts in connection with it that may bear upon treatment or prognosis, then the history and general condition of our patient become matters of real importance. Let me illustrate this point. Suppose, for example, three patients present themselves in succession for examination. The first shows you his arms covered from the back of the hand to the elbow with a minute red papular eruption, attended with sensations of burning and itching. The eruption ends abruptly at the bend of the elbow; it is at once recognised as eczema in the papular stage. From the history, we find that his forearms have been exposed at cricket to a burning sun; we consequently conclude that the eruption is the effect of heat and exposure, and will probably disappear in a few days. In the second patient, there are red, excoriated, and weeping patches of skin on the inner sides of the thighs, the axillæ, and other parts of the body, which are evidently eczema; and we further find that our patient has been for some weeks rubbing into the skin a strong sulphur ointment, with the view of curing a real or supposed scabies. Here, again, we have to deal with an eczema, but one developed from different causes and under different circumstances. In this case, a discontinuance of the use of the sulphur ointment will

probably lead to a rapid cure. In the third case, a middle-aged man suffers from dry, scaly, and very irritable patches about the flexor sides of the limbs. This is still eczema; but we learn that he has had similar patches on several previous occasions, and that he has had gout more than once. We know then that we have to treat chronic eczema in a gouty man, and we adapt our remedies to meet the case. In all these three instances, then, the name of the eruption is identical. In all three, we have to deal with eczema, but eczema of different kinds, and produced in very different ways. Merely, then, to pronounce a skin-affection to be eczema is, I maintain, but a *very imperfect diagnosis of the disease*. We are so apt to be deceived by a mere name! The diagnosis of any malady is only valuable in as far as it leads to correct treatment and prognosis, and any method that stops short of this is a very imperfect one. In other words, the etiology of a disease is in many cases inseparable from the diagnosis.

From what I have said, it will be inferred that I use the expression "history of a case" in a comprehensive sense, and include the following points, which all bear more or less on a full and complete diagnosis: (1) Age and sex of the patient; (2) Occupation or mode of life of the patient; (3) Past history; (4) Present condition.

With regard to (1) the age and sex of the patient, I would only remind you that certain skin-affections, like the diseases of other organs, are almost unknown at particular periods of life, and that some diseases are exclusively confined to one sex. For example, acne is not met with in babies, or syphilis in women. Tinea tonsurans of the scalp is an affection of children, and pityriasis versicolor of adults. True ichthyosis is a congenital affection, and therefore may be excluded when we have to deal with a disease making its first appearance in adult life. (2) With regard to occupation and mode of life, it will be sufficient to indicate that certain skin-affections are produced by particular occupations, and that others are common only amongst certain classes. (3) The past history includes both that of the *patient* and of the *eruptive* attack. The past history of the *attack* must be in many instances of primary importance. Thus, for example, we may have to deal with cases of urticaria, in which the visible effects on the skin are the same, but which spring from very different causes. One may be due to poisoning by shell-fish, another to a continued course of copaiba, a third to the irritation of pediculi, and a fourth may be purely an affection of the nerves. To be satisfied, then, with the mere name (urticaria) would be as unreasonable as it would be to treat all four cases in the same way. In order to arrive at the past history of the patient, it will often be advisable to draw our conclusions from indirect questions and observations. Thus, in investigating a suspected syphilitic eruption in a woman, the indirect method is almost always preferable. Often the nature or even the existence of the primary inoculation is unknown to the patient, while she is well aware of having suffered from ulcerated sore-throat, or nocturnal pains, or of having miscarried. But we are not always dependent on the statements of our patients in arriving at conclusions as to their past history. Scars are often left on the skin or about the fauces which are silently eloquent of former disease.

In stating that the general condition of health is inseparable from a comprehensive diagnosis of skin-affections, nothing more is intended than that diseases of the skin, like the diseases of other excreting organs (for example, the kidneys), are often associated with certain constitutional states or diatheses, and sometimes with special diseases of other organs; in other words, that the skin-affection, in many instances, cannot be regarded simply as an uncomplicated local malady. These remarks apply especially to such diseases as small-pox, chicken-pox, syphilis, and elephantiasis Græcorum, where the skin-affection is only a small part of the malady; but also in a less degree to such affections as eczema and psoriasis, which are so often associated with either a gouty or scrofulous diathesis. But, further, we often find skin-affections influenced by disease of particular organs. For example, not long ago, I had under my care in the Middlesex Hospital two severe cases of the pityriasis rubra of Hebra, associated with chronic albuminuria, and we remarked in both cases that when the condition of the skin improved for a time the albumen diminished, and *vice versa*; this occurred so many times that it would be impossible to regard it as an accidental coincidence. It is immaterial for the purpose of my illustration whether the temporary improvement in the action of the kidneys produced a change in the skin, or *vice versa*. The fact that some skin-diseases, such as scabies, are purely local, does not in any way disprove the truth of my proposition, that we must regard a pathological condition of the skin just as we should regard a pathological condition of any other organ of the body, and that without this our *diagnosis is incomplete*.

To sum up the foregoing remarks, we may lay down the following brief rules for our guidance in the examination of diseases of the skin.

1. Examine all parts of the body in which an eruption is present; 2.

Take a general view of the eruption regarded as a whole; 3. Separate it into its component parts, and distinguish what is the essence of the disease from what has been superadded; 4. Notice the tissues involved, and the presence or absence of infiltration, inflammation, etc.; 5. Notice the form or shape of the patches of eruption; 6. Observe the locality affected; 7. Investigate the subjective sensations of itching; 8. Ascertain the past and present history and general condition of the patient.

ON THE ACTION OF MEDICINES, OLD AND NEW.

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IV.

Succus Conii.—Towards the close of my last paper (BRITISH MEDICAL JOURNAL, July 24th, 1875), I directed attention to some preparations in the *Additions to the British Pharmacopæia* of 1867, and I spoke of the value of the juices, or *succi*, that had been lately introduced. It is remarkable how slowly some things win official acceptance. In 1864, Dr. Garrod wrote that these preparations (the *succi*) had been for some time in medical use; for the first time three were then made official, and two more were added in the Appendix. Five juices are the rather meagre resource which pharmacy has offered us in this department of the *Pharmacopæia*. Of more importance, however, than the penury of pharmaceutical skill is the official dosage, which in this case is certainly misleading. What sort of value, asked the late Dr. Anstie, can be attached to the statement that the *succus conii* may be given in doses of from thirty to sixty minims? It had been recognised for some years past that four or five drachms may be often given without the production of any marked physiological phenomenon; and even ounce-doses of this juice (prepared by a first-rate manufacturing druggist) have been administered without producing any recognisable effect whatever.

Conceding the possibility of a substance having important therapeutic powers and yet causing little physiological disturbance in the healthy human body, it is at least very unlikely that a fluid drachm-dose of any drug will be of much use if an ounce-dose can be taken with impunity. Now, it has been asserted that no poison, except prussic acid, excels conia in the subtlety and rapidity of its operation; and, when introduced into a vein, the fatal effect is almost instantaneous. Hence we can draw an approximative conclusion of the comparative inertness of the official preparations of conium. Dr. Stillé relates of Dr. Pliny Earle, that he took experimental doses of extract of conium in order to discover how much he could bear. Beginning with a grain three times a day, he gradually augmented the quantity until, on the fifteenth day, he took at each dose twenty-five grains. The effect was "such a fullness in the head as might be caused by a ligature around the neck, together with some vertigo". Forty-five grains on the following day caused a repetition of the same sensations, "with the addition of weakness and weariness of the knees and a vacillating gait". And John Hunter records that, in a case of phagedænic ulcer resulting from bubo, he administered extract of hemlock in doses gradually increased to two ounces and a half a day. Dr. Stillé justly remarks that the enormous doses of conium required to produce the effects described in Dr. Earle's experiments, render it certain that the preparation used by him was very feeble. In an early number of the *American Journal of Medical Science*, Dr. Fountain tells us of very different and even dangerous results from taking twelve grains of an extract prepared from the seeds at a temperature below the boiling-point.

It was Dr. Nelinan who first used or praised the *succus conii*; and, when the average dose recommended by so high an authority was only thirty minims, there may be an apology for the official standard being misleading. In my last paper, I gave the outlines of a case of violent "hysterical chorea", occurring in a married lady of forty-six or forty-seven years of age, so turbulent and exhausting as to induce some fears of the possible issue. Three ounces of hemlock-juice were consumed daily for several days with a very happy therapeutic effect; and I am now able to add that since this illness (in 1874) there has not been the slightest return of the malady. I may remark here that in the *United States Dispensatory* there are two preparations, called respectively the alcoholic extract of hemlock and the fluid extract of hemlock.

Hyoscyamia.—Considering that *hyoscyamia* has been lately proposed as a remedy for acute mania, it is rather remarkable that both Hippocrates and Dioscorides speak of large doses of henbane as capable of exciting delirium, which was compared to the delirium of drunkenness. The more valuable of the modern researches on the action of hyoscyamia begin with a contribution by Dr. Oulmont in the *Practi-*