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SOME PROBLEMS IN PSORIASIS*

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We have perhaps been too ready to admit that psoriasis is an incurable disease of unknown aetiology, and to console ourselves with the suggestion that it only affects the healthy. I doubt if any of these statements are true. Whether they are true or not, it is a fact that psoriasis, one of the commonest of skin affections, imposes on the sufferer a burden which only too often he carries through life, and which is readily understood and implied by the term "European lepra," its name in olden times. The disorder merits our constant attention and untiring effort in its relief, and it is obviously fatuous to dismiss it as incurable when we all know that if the patient can be transferred to a hot and sunny climate the psoriasis spontaneously disappears.

In considering some of the problems associated with this subject, and in particular problems of treatment, I must pass over the ordinary and accepted facts. I would, however, like first to deal with one or two points which seem to me to merit attention. We are all very familiar with the silvery scaling as a clinical feature of psoriasis, and with the characteristic distribution on elbows, scalp, knees, and extensor surfaces. It so happens, however, that many cases of psoriasis come to us for the first time having had some treatment with ointment which has removed most of the scaling, and upon occasion psoriasis does affect other than the typical sites. Patients with a recent eruption on an atypical site may not mention, or may not associate it with, old-standing chronic lesions on typical areas, which may thus be overlooked.

More important than the silvery scaling is, in my opinion, the colour of psoriasis, which is an admixture of red and brown—something approaching salmon-red—and the demarcation of the lesions themselves. No matter what variation the eruption of psoriasis may take, these two features are fairly constant. There are only two or three other common scaling erythemata which appear as generalized eruptions—namely, seborrhoeic dermatoses, pityriasis rosea, and squamous eczematous eruptions—and none of them presents those two characteristics. It is therefore quite easy to make a diagnosis of psoriasis in the vast majority of cases even in the absence of the typical scaling and the typical sites.

Problems in Diagnosis

Though psoriasis is commonly symptomless the majority of patients, if questioned, will admit to a certain amount of itching, particularly when they are warm or are in bed. In a proportion of cases, probably something approaching

30 per cent., itching may be very severe. This feature would seem to depend largely on the temperament and nervous make-up of the subject rather than the psoriasis itself, except in relation to psoriasis of the perineum and various mixed reactions, to which I will refer later.

Attention must be drawn to the difficulties in diagnosing psoriasis when it involves certain particular sites. In the majority of cases psoriasis will exist elsewhere than upon the atypical sites and the diagnosis will be clear, but in rare instances limited sites alone may be involved and may cause some difficulty. Sometimes a patient, not associating an old chronic eruption on elbows and knees with a recent affection of the face or perineum, may not mention the chronic trouble, thus unintentionally misleading the doctor.

Scalp.—Commonly psoriasis of the scalp is more readily diagnosed by palpation than by inspection. The eruption, consisting of well-demarcated thickly scaling lesions, feels like a miniature mountain range, and quite unlike any other scalp affection. Occasionally, however, psoriasis involves the whole scalp, in which case there is a diffuse scaling erythema which may only with difficulty be differentiated from a simple scurf. Careful examination may disclose at the hair margins the colour and characteristic demarcation of the eruption, but this may be absent. With psoriasis elsewhere, there is no question but that such a condition would also be psoriasis, but should the affection be limited to the scalp then difficulties may arise. I think it is quite wise to assume that any chronic, dry, scaling scurfiness of the scalp which does not readily respond to ordinary anti-seborrhoeic measures, such as sulphur and salicylic ointment, or perchloride and resorcin lotion and spirit shampoos, is likely to be psoriasis, or, at all events, may respond to anti-psoriatic treatment.

Face.—Contrary to most teaching and most textbooks, it is my experience that psoriasis of the face is very common. Whatever the explanation of this may be, and whether or not it is a peculiarity of the district, I never have the slightest difficulty in producing cases of facial psoriasis to demonstrate to students. It is wise to bear this in mind, for it has not been uncommon in the past for practitioners to console their patients by saying that the affection never involves the face. Psoriasis of the face rarely suggests that diagnosis to the uninitiated. It commonly has the appearance of seborrhoeic dermatitis or of lupus erythematosus. Hardly ever does one see the typical heaped silvery scaling even in cases which have received no ointment therapy. The colour and the demarcation of the lesions are not always present, but I have never to my knowledge seen psoriasis of the face without its occurrence elsewhere.

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Flexures.—Psoriasis affecting axillae, perineum, and under the breasts is not very uncommon, especially in seborrhoeic subjects. It is never covered with scales, but merely presents the salmon-red demarcated plaques which sometimes become slightly eczematous and moist or fissured. Psoriasis of these sites is usually very irritable, and, particularly in the perineum, it may exist with little psoriasis elsewhere. The use of strong applications in these sites is limited; and this affords one of the occasions when I think it justifiable to employ x rays for psoriasis, the response as a rule being good. With psoriasis of the perineum it is most important to exclude any local irritant factors, particularly sugar in the urine, as a provocative cause of the eruption. In connexion with this one may mention psoriasis of the glans penis. Here the affection shows no scaling, and the red, well-demarcated thickened plaques can easily be confused with the so-called psoriasiform carcinoma, an intra-epidermal non-penetrating growth. It may be quite impossible to differentiate such a carcinoma from psoriasis clinically until there is evidence of psoriasis elsewhere. Even histological examination may present considerable difficulties to the expert.

Palms.—Discrete nummular psoriasis of palms and soles very closely simulates a secondary syphilitic eruption of these sites. There is the same sense of infiltration, the same colour, and both may be associated with a widespread eruption and may have followed a throat infection. Examination of lesions elsewhere on the body, however, usually makes the diagnosis clear.

Nails.—I think it is quite impossible to diagnose psoriasis of the nails unless there is evidence of psoriasis on other parts of the body. Any dystrophy or a ringworm or other infection of the nails may exactly simulate a psoriatic change. Pitting and distortion, thickening and opacities, and even heaping up of the nail-bed may occur in any of these states, but the pin-point pitting and the heaping up of the nail-bed causing eversion of the distal end of the nail are rather more characteristic of psoriasis than of other affections. Psoriasis almost invariably affects all nails of the hands and feet, as do most dystrophies; but infection, as in ringworm, more frequently involves a limited number of nails, no matter how long the infection may have existed. Unless the eruption exists elsewhere the most careful search for fungus should be made by nail-scraping and examination in liquor potassae. Since the disturbance which produces a psoriasis of the nails originates in the nail matrix it is obvious that local applications cannot be of much service. While internal remedies are of some limited value, x rays are undoubtedly of much use in treatment.

Mixed Psoriatic Reactions

Though generally occurring as a simple and pure reaction, psoriasis may upon occasion cross with other reactions such as the toxic erythematous, seborrhoeic, lichenoid, and eczematoid. It is my experience that such mixed reactions nearly always form a type of psoriasis very difficult to treat and one that tends readily to relapse.

TOXIC ERYTHEMATOUS PSORIASIS

This type of reaction is often widespread; it particularly affects the extremities, including the hands and feet, face and ears, and on casual examination suggests an ordinary toxic erythema of the multifiform type. Careful examination reveals that the eruption varies from a variety of lesion which appears to be pure and simple toxic erythema in everything except its persistence to lesions which, commonly occurring on the typical psoriatic sites, are true

psoriasis with the characteristic silvery scale and demarcation. These cases often follow some acute infective process, particularly an infection of the upper respiratory tract. Unlike an ordinary toxic reaction, they persist until taken seriously in hand, and even then are most difficult to treat. The lesions on the extremities often simulate those of an acute lupus erythematosus, and it is interesting that some of these appear to be helped by gold therapy. These cases should always be treated in bed, and should receive mild local applications. A search for any focus of infection which may have been responsible for the eruption should be made, and if possible it should be eradicated.

SEBORRHOEIC PSORIASIS

This type of mixed reaction is more easily recognized, and has received more attention in the literature, particularly the French. It would seem that in these cases we are dealing with patients who have a tendency to react by psoriasis and in whom the provocative cause of the eruption has been a seborrhoeic outbreak. Though psoriasis commonly occurs on the usual sites it also in these cases involves the typical seborrhoeic sites, particularly the head, mid-chest and back, axillae, perineum and flexures, palms, and soles. Such cases are not particularly resistant to treatment, and should be attacked along the usual lines. Upon occasion, however, one meets with lesions of the so-called "seborrhoeid" type—usually few in number, well demarcated, and lichenified—which do not develop the characteristic scaling of psoriasis and which may be most resistant to treatment.

LICHENOID PSORIASIS

This type is in my opinion a cross-reaction between psoriasis and lichen planus. Section of a lesion histologically will show parts with the characteristics of psoriasis and other parts with the characteristics of lichen planus. The sites tend rather to be those of lichen planus—the inner thighs, the lower legs and forearms, both flexor and extensor—but this form of psoriasis is in my experience one of the most difficult with which to deal. It is, I believe, very uncommon, and in most cases may with confidence be diagnosed as one or other of the two affections at different times; but long observation convinces me that the reaction is really one of the mixed type. Treatment should, in my opinion, be essentially directed towards the psoriatic element, but I have sometimes found it quite impossible to clear these cases.

ECZEMATOID PSORIASIS

It is natural that psoriasis, if it is irritable, should become eczematized by rubbing and scratching, and this does sometimes happen. The eczematization is usually of the chronic type—lichenification—and the superimposition of the lichenification on the psoriasis is fairly obvious. The combination does not, however, present any difficulties in treatment so long as some internal sedative-tonic measures are adopted and local treatment at first is mild. I believe, however, that what we have in recent years been describing as "pustular psoriasis" is in fact a mixed psoriasis and acute eczematous reaction. This is a much more complicated and difficult problem, and calls for very careful approach and treatment.

In the acute cases the ordinary psoriatic eruption on trunk and limbs will on close examination disclose in places groups of minute pin-head-sized lakes of sterile pus, but the feature is most in evidence on the hands and feet, where it is rather in the nature of a pustular pompholyx—some lesions being vesicular and some pustular, some pin-head-sized and others larger, but the whole

associated with and merging into a scaling erythema, and the pompholyx lesions healing to leave brown macules which eventually clear without scarring.

In the chronic cases the eczematous element, which is still occasionally vesicular but mostly pustular, tends to consist of more uniformly pin-head-sized lakes, to be confined to palms and soles, and more particularly to involve thenar and hypothenar eminences. There is often some scaling erythema in these sites, but quite half the cases show no typical psoriasis elsewhere, and it is still a matter of dispute whether they are all examples of the same type of reaction and whether they are related to psoriasis or not. We may for the present call them "persistent pustular pompholyx," but I believe they are a mixed psoriasis-and-eczema reaction. The cause of such a reaction may upon occasion be too vigorous local treatment, but more often it is the reaction to some internal disturbance. In a proportion of cases—perhaps 30 per cent.—it appears to be the toxæmia from an acute or chronic infection, usually of the upper respiratory tract, particularly tonsillitis and gingivitis. The pustular psoriatic reactions from acute infection, in my experience, resolve readily with rest in bed, attention to the acute infection, and mild anti-psoriatic measures. The chronic reactions which often affect only palms and soles are not greatly or permanently influenced by local treatment—which again must be mild—but often clear with removal of a chronic infection if such can be found, as in the tonsils. A number of these chronic cases, however, are, I believe, dependent upon constitutional disturbances other than toxic, such as nervous and endocrine influences, and may be quite incurable.

Aetiological Factors in Psoriasis

There is no evidence that psoriasis is an infection, and very little, I think, to support the view recently expressed in Germany that it is due to a disturbance of fat metabolism. It is as true to say that we do not know the cause of psoriasis as it is to say that we do not know the cause of any other constitutional reaction—for example, eczema or dyspepsia. We know, in the first place, that the tendency to psoriasis is often inherited; we also know that it disappears during severe illnesses from organic disease or with protein-shock therapy. It is more important to remember that it tends to be provoked by minor maladies such as the acute specific fevers, tonsillitis, influenza, or "colds in the head." Pregnancy and nervous shock are other common causes of acute outbreaks of psoriasis, while the more chronic states of physical and nervous debility, as well as the vague influences of puberty and the menopause, regularly determine the onset of exacerbations of this affection. It is very rarely that there is not some obvious precipitating cause for psoriasis, but, once provoked, the reaction tends to persist, like most skin reactions. When the patient is in the psoriatic state external injury will also bring out psoriasis at the site of injury.

All these features are characteristic of constitutional reactions in general, and to them may be added the very definite susceptibility of psoriasis to suggestion and to climatic influences, particularly to sunlight. I repeatedly observe the influence of suggestion in these cases, and may cite as a good example a very extensive case, approximating in part to the pustular type, in a patient who had been affected for nine months. Ten days after I saw him I arranged to admit him to hospital as being valuable for teaching purposes, and requested his doctor to make no alteration in treatment. On admission the patient was

practically clear, and attributed his improvement to the ointment which he imagined I had prescribed. The importance of this aspect lies in the fact that one may obviously do harm by telling a patient with psoriasis that his condition is incurable and that treatment is useless. The susceptibility to climatic influences is more important, for it is well known that in very warm and sunny climates psoriasis will disappear, and will not reappear so long as the patient remains in that climate. It is obviously absurd, therefore, to suggest that treatment is useless.

Treatment of Psoriasis

Treatment of any constitutional disorder must take seriously into consideration the make-up of the patient and his environment. The highest degree of physical and mental health is desirable and should be aimed at, and excesses and variations from the normal should as far as possible be avoided. All this is very true of psoriasis, but the need for the eradication of foci of sepsis, especially about the upper respiratory tract, must be emphasized. These general aspects of treatment I will leave, and will now deal with the particular.

In Leeds we have two routine lines of treatment, sometimes instituted separately and sometimes in combination. The first is by tar baths and sunlight, and this is the more cleanly and pleasant line of attack. A tar bath merely consists of the addition of 4 oz. to 8 oz. of liq. picis carb. to thirty gallons of water, in which the patient soaks for ten minutes or a quarter of an hour. This is immediately followed by an exposure of the whole body to the ultra-violet lamp, starting usually with a dosage of one minute at three feet distance to the front and the back. The dosage is very gradually increased, usually by about a minute a week, and rarely exceeds a maximum of four or five minutes. The addition of a little heat therapy, as from a sollux lamp, at the same time probably increases the efficiency of the treatment, and certainly adds considerably to the comfort. With this treatment patients are advised to use a small amount of the following ointment at night-time to remove scale.

R _x	Acid. salicylic.	...	...	...	...	gr. v
	Hydrarg. ammon.	...	...	...	...	gr. x
	Liq. picis carb.	...	...	...	...	℥ xxx
	Paraff. moll.	...	...	...	ad	3 j

It is in my opinion important that this treatment should be regular and be undertaken daily; in the majority of cases the psoriasis is cleared up in the matter of a few weeks, sometimes in less than two weeks.

The second line of treatment is by cignolin (dioxanthranol, a synthetic chrysarobin substitute). Here all the psoriasis present, from head to feet, is thoroughly inuncted twice daily with the following ointment:

R _x	Cignolin	...	...	...	...	gr. j
	Acid. salicylic.	...	...	...	...	gr. v
	Hydrarg. ammon.	...	...	...	...	gr. x
	Liq. picis carb.	...	...	...	...	℥ xxx
	Paraff. moll.	...	...	...	ad	3 j

This ointment rapidly deteriorates, and must be dispensed afresh every few days. My routine is to prescribe it afresh every third day, increasing the amount of the cignolin by 1 grain each time up to 4 grains or sometimes 6 grains, depending on the reaction.

This treatment is most rapidly and thoroughly effective when the patient is kept at rest in bed or at least in a dressing-gown existence, so that he is constantly soaked in the ointment. Even baths may be avoided with advantage, or be taken only at intervals of four or five days. The effect of treatment is to produce a reddening and

discoloration of the skin from the cignolin, the colour being a lilac tint; the garments in contact with the ointment are also lightly stained. If the patient cannot be confined to his room then the ointment therapy is applied thoroughly at night and he has a bath in the morning. Under ideal conditions this method will usually clear up an attack of psoriasis in two to three weeks. If this treatment is combined with light therapy the patient has a morning bath, followed by exposure to the ultra-violet lamp and by the inunction.

So much for the particular treatment of the attack of psoriasis. More important than this, however, is the further treatment directed towards preventing relapses, for this is of greater benefit to the chronic sufferer than the temporary clearance of the eruption. In my experience it is of the utmost value for psoriatics to have a *daily* exposure to the ultra-violet lamp after the ordinary toilet bath throughout the year, or at least from September to May, and it is obviously most desirable that the patient should himself possess a lamp in his own home, so that the treatment may be added to his ordinary toilet routine without imposing any serious burden upon him. A small type of lamp is usually sufficient for this purpose, and though the cost is moderately high the expenditure is, it seems to me, a wise one in view of the fact that we are dealing with a malady which is likely to be an affliction for many years, if not for life. The effect of this addition to the toilet routine is often to keep the patient completely clear of psoriasis. Even if this ideal is not attained the state of affairs is so vastly improved that life has an entirely different aspect for the chronic sufferer. It is undoubtedly the next best thing to being able to live in those climates where psoriasis does not exist.

If for reasons of expense or other circumstances this routine cannot be adopted an occasional clearance by a course of cignolin treatment, such as that indicated, is the most that can be done. In very obstinate cases it is sometimes helpful to give mild protein-shock therapy such as whole-blood injections, or intravenous injections of T.A.B., ten to twenty millions, on two or three occasions, at intervals of about five days. In some hands the use of intravenous gold injections is said to have been beneficial, but I have found it only occasionally of value. I very commonly, however, put patients with psoriasis on 1/8 grain of luminal, twice daily, after food, for long periods at a time, and believe that it does much to reduce the reactive tendency of the skin.

There are two further problems which these patients often put to the physician. They first ask, "Can you cure me, doctor?" to which I think the appropriate reply is, "No; but you can cure yourself by understanding the nature of the ill and the various remedies at your disposal." The next question is, "Should I marry?" and my own view is that psoriasis should not be regarded as a bar to matrimony, since it need not necessarily be passed on to the offspring, and, if passed on, can be adequately treated.

The Central Association for Mental Welfare has arranged a course for persons engaged in the training of mental defectives in occupation centres, institutions, or mental hospitals, and for home teachers, to be held in London from July 4 to 23; also a course for officers of local authorities and local associations for mental welfare engaged in the ascertainment and supervision of defectives, during the same period. Full particulars of both courses may be obtained from the educational secretary, Central Association for Mental Welfare, 24, Buckingham Palace Road, London, S.W.1.

THE STATE OF THE HEART IN GALL-BLADDER DISEASE

A PERSONAL INVESTIGATION

BY

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In considering this subject it is unfortunate that space does not permit of even a survey of the literature, but all the references are appended in the bibliography and the conclusions arrived at from their study are here presented:

1. Myocardial degeneration is not infrequently found in cases of cholecystitis and/or cholelithiasis.
2. The clinical manifestations of gall-bladder disease may closely simulate disease of the heart, particularly coronary artery disease, and the reverse is equally true.
3. The cardiac condition has been benefited by surgical treatment of the gall-bladder lesion in a proportion of the cases. In assessing these cases it is difficult to decide whether to attribute this amelioration of the cardiac manifestations to the removal of the noxious influence of a pathological gall-bladder or to the beneficial effect of the period of enforced rest in bed, a measure which must always favour a return to normal on the part of the myocardium.
4. Although a few examples of infective endocarditis occurring in cases of gall-bladder infection have been reported, there has been no unequivocal proof that the endocarditis was secondary to the invasion of the gall-bladder with pathogenic organisms, and any murmurs developing during an attack of cholecystitis are to be regarded as belonging to the so-called "functional" class, dependent upon dilatation of the chambers of the heart, and thus, indirectly, on the state of the myocardium.
5. Associated factors—for example, obesity, age, etc.—must be considered in assessing the possibility of any direct relation between gall-bladder lesions and heart disease.
6. The theory of submural streptococcal infection arising in the gall-bladder substance and thence spreading to the myocardium via the lymphatic and blood channels, as suggested by Rosenow and supported by D. P. D. Wilkie and others, constitutes the most generally accepted explanation of the relation between lesions of the gall-bladder and heart.
7. There is some evidence to suggest an increased incidence of lesions of the coronary arteries in the subjects of gall-bladder disease.
8. The operative treatment of gall-bladder lesions, by cholecystectomy where possible, should not be delayed long, and is not contraindicated by the presence of a cardiac lesion provided the state of the heart is compatible with the patient surviving the operation.

The Present Investigation

This investigation is based on a personal study of sixty-five consecutive cases of gall-bladder disease admitted to the wards of Mill Road Infirmary, Liverpool. Although the study was essentially a clinical one, Graham's cholecystography, electrocardiograms, the urea clearance test, and the Wassermann test were routine measures. The assessment of the condition of the cardiovascular system was arrived at after consideration of the symptoms of cardiac insufficiency, clinical and electrocardiographic findings, and the patient's response to a standardized exercise test. The diagnosis of gall-bladder disease was based on the symptoms and clinical findings, together with evidence of gall-bladder dysfunction as detected by