was certainly effected in two out of the remaining five cases, 86 per cent. in all.

The other three patients have changed their address and have been lost sight of, but as they were instructed to report themselves if not cured and have not done so, it is probable that the treatment was effective in those cases also.

Great credit is due to the sisters in charge of King's ward (males) and Murray ward (females) for the careful search for the head of the worm which they have made in every case. In the former ward the treatment has been successful in the last thirteen cases; and in the latter, where the cases are not so numerous, in three successive cases.

There appears to be a belief that oil of male fern is less successful against *Taenia mediocanellata* than against *Taenia solium* and the *Bothriocephalus latus*. This series of cases, so far as it has any bearing on the point, does not support such a view. None of the very various toxic symptoms described as having occasionally followed the administration of this drug were observed.

An Address

ON

PSORIASIS AND ITS TREATMENT.

DELIVERED BEFORE THE EALING DIVISION OF THE
METROPOLITAN COUNTIES BRANCH OF THE
BRITISH MEDICAL ASSOCIATION.

By P. S. ABRAHAM, M.A., M.D., B.Sc., F.R.C.S.I.,
SURGEON, HOSPITAL FOR DISEASES OF THE SKIN, BLACKFRIARS;
DERMATOLOGIST, WEST LONDON HOSPITAL, AND LECTURER
ON DISEASES OF THE SKIN, POST-GRADUATE COLLEGE.

WHEN your Honorary Secretary did me the honour to invite me to read a paper before you, I happened to be in a somewhat depressed state of mind. I was thinking of our, or I should say my, deplorable ignorance concerning things which are constantly around us. Take this common disease psoriasis, for instance, cases of which must frequently come under the notice of all of us. At first sight it might appear almost a waste of time—a work of supererogation—to make it the subject of a paper to be read before such a body of medical men as this; but I fear that, although this disease has been so long known to medical science, we must confess that, as with many other diseases with which we have to do, our knowledge of it is still far from complete. In point of fact, opinions still differ with respect to its etiology, its pathology, and even in regard to its treatment.

I propose to discuss shortly a few points in connexion with some of the various views, and to refer particularly to some observations that I have made, and some conclusions that I have arrived at from a study of a number of cases which have been under my own care at the Hospital for Diseases of the Skin (Blackfriars) and at the West London Hospital.

ETIOLOGY.

For a long time, and by many authorities in this country, psoriasis was regarded as largely a manifestation of the "gouty diathesis," and in France the "arthritic" constitutional condition was and still is by many considered to be the important etiological factor; on the other hand, it has been looked upon, especially in Germany, as a purely local or external affection unconnected with any internal or constitutional defect. Many dermatologists in Europe and America now consider it to have a "neuropathic" origin, while a still larger and increasing number believe that it is really a parasitic disease, and that it is communicable by contagion.

Arguments and cases in illustration can be, and have been, brought forward in favour of all these different views, and yet, as far as I can see, the matter stands very much where it did: that we do not, beyond all doubt, know the true cause of psoriasis.

If we take, moreover, the numerous observations that have been made on the histo-pathology of the efflorescence, it is extraordinary how the various investigators differ, and at what diametrically opposite conclusions they

arrive. According to a large number of excellent authorities, such as Kaposi, Neumann, Rindfleisch, Weyl, Vidal, Bazin, and a host of others, the initial lesion in psoriasis occurs in the true skin; while according to just as many equally able observers—for example, Besnier, Unna, Neisser, Auspitz, Rosenthal, etc.—the primary lesion is in the epidermis. Comparatively recently these fundamentally-different theories have been accentuated by two important observations: one by Munro, who maintains that the first lesions seen in psoriasis are small erosions in the horny layer of the epidermis, followed by the formation of small miliary abscesses; and the other by Verrotti, who claims that the early changes take place in the true skin, and are caused by an "acid auto-intoxication," which is in direct relation to the renal functions.

The only points upon which every one seems to agree, and which my own sections taken from 6 cases confirm, are that microscopic sections show at some time or other hyperaemia of the vessels of the papillary and subpapillary layers of the corium with perivascular cell infiltration, and hyperplasia of the Malpighian layer of the epidermis with parakeratosis or anomalous keratinization.

I would venture to suggest that the explanation of a great part of all this divergence of opinion (and not only in pathological matters) is to be found in the tendency of so many observers to generalize from insufficient data. A microscopist makes a few sections from a case or two of a disease, and prepares and stains them in his favourite manner. If he has a theory, he naturally is inclined to see what he thinks ought to be there, and to attach great importance to whatever bears out his view, at the same time (no doubt unconsciously) overlooking or minimizing other points which are perhaps really existent in the same sections. But apart from this possibility of error he is often too apt to jump to a decided conclusion—*Ex uno disce omnes*—and to think that what these particular sections show him must be the true and only pathology of the disease. I am afraid that this criticism is applicable to some of the publications of even our "great" authorities.

I shall say but little in reference to the micro-organisms which have been from time to time described in connexion with psoriasis. Lang's fungus "epidermophytosa" is believed by most pathologists to be nothing more than particles of eleidin made manifest by the mode of preparation; and the morococci described by Unna and the microbes seen by others are not yet generally accepted as pathognomonic of the disease. The arguments in favour of microbic origin, indeed, are mainly based upon other considerations, such as the clinical behaviour of the eruption, the undoubted effect of parasiticide remedies, the occasional instances of possible contagion and successful inoculation.

Some twelve years ago I made a short communication on the subject of psoriasis at the Newcastle meeting of the British Medical Association, and presented some statistical notes concerning 355 cases of the affection which had occurred among 3,700 patients suffering from various diseases of the skin that had been under my observation during the preceding two or three years. It may be interesting to compare these notes with somewhat similar statistics of cases that have more recently—within the last five years—been under my care at the two hospitals. I have to thank Dr. E. J. Cowen, my able clinical assistant at Blackfriars, for compiling and annotating (no small work!) the statistics of that hospital. These recent figures refer to 582 cases of psoriasis occurring within the last five years among a total of 10,759 skin patients. The numbers show a percentage of 5.4 of psoriasis in relation to other diseases of the skin. As seen in the table, the ratio differs to some extent in the two hospitals; at Blackfriars it is 333 in 5,368, or 6 per cent., and at the West London Hospital 249 in 5,391, or 4.8 per cent.

In my 1893 figures the proportion of psoriasis to other diseases of the skin was 9.5 per cent., a ratio considerably higher than the above, and indeed higher than that previously published by other observers in this country, which was about 7.5 per cent.

Are we to conclude from the present obviously smaller percentage that psoriasis is diminishing in London in the hospital class? I am not prepared to say yes, for it is plain that any such deduction could only be even approximately made by including the similar statistics of all the other special skin hospitals and dermatological depart-

Statistics of Psoriasis.

	Black-friars (1903-4).	W. L. H. (1900-4).	Total.	1893 Statistics.
Skin patients	5,388	5,391	10,759	3,700
Psoriasis	333=6%	249=4.8%	582=5.4%	355=9.5%
Males	147	92	239	133
Females	186	157	343	222
Age of onset:				
Birth to 3	12	16	28	13, 90
4, 7	41	46	87	62
8, 15	89	89	178	42
16, 20	48	13	61	26
21, 30	73	37	110	18
31, 40	32	20	52	
41	26	20	46	
First came to hospital:				
Jan.—March	83	60	143	
April—June	94	71	165	
July—Sept.	56	55	111	
Oct.—Dec.	77	54	131	
Relatives affected:				
Father	21	15	36	21
Mother	16	7	23	9
Brothers and sisters	27	16	43	26
Others	17	7	24	11
Rheumatism or gout	37	22	59	5
Dyspepsia, constipation	31	8	39	
Out of health	23	38	61	
Suckling or pregnant	15	6	21	12

ments of the general hospitals of the metropolis. Apart from the advisable caution with which every careful man receives statistics in general, it must be remembered that there are numerous and varying conditions especially affecting the various hospitals and the different localities—as exemplified by the figures I give for my two hospitals—and that in any case any conclusions based upon such statistics can, at the best, and however carefully one may try to elicit the truth, be regarded as only approximate. I can, indeed, only say for myself that I am at present seeing proportionately fewer hospital cases of psoriasis than I did formerly, and that if the experience of others confirms mine, there must be something to account for such a diminution.

SEX.

One of the points that I laid especial stress upon in my former communication was that females in my experience seemed to be more often affected with the disease than males, the ratio being as 1.7 to 1; and I then remarked how greatly that observation differed from the figures given by other observers.

The British authorities consider that the sexes are about equal in psoriasis, but on the Continent it appears to be beyond doubt that the males largely predominate—according to Nielsen in the proportion of 3 to 2, and in some countries in a much greater ratio. My present figures to a great extent corroborate my older ones, the ratio for the two hospitals being about 1.5 females to 1 male (Black-friars, 186 to 147, and at the West London Hospital 157 to 92). It is possible, of course, that adult men in England do not think quite so much of their skins as the men abroad, and do not come so much to the hospital for a mere patch or two of psoriasis; be that as it may, I still think that some other more satisfactory explanation is needed of the fact that I have seen at the hospitals far more cases of psoriasis in females than in males. I should, on the other hand, state that the disparity between the sexes is far less marked in the case of the children who are brought to the hospitals with psoriasis than in the older patients.

AGE.

I believe that Nielsen was the first to emphasize the fact that psoriasis ought really to be regarded as a disease of early life—a conclusion that I confirmed by my own inquiries in 1893. It is true that the majority of the patients who come before us are of adult age; but if we carefully note the age of onset, or the time that the affection first appeared in the patient, it will be found that in a considerably larger proportion of the cases it begins in early youth. My 1893 statistics gave 64 per cent. as commencing before maturity, and my present figures further illustrate this truth. Of the total number of 582 cases, no less than 50 per cent. were affected before the age of

15—142 in 333, or 42.6 per cent., at Blackfriars; and 151 in 249, or 60 per cent., at the West London Hospital. A total of 120 actually commenced before the age of 7, and the disease was stated to have started in 28 cases in the first three years of life—in 2 shortly after birth, in 1 at 4 months, and 1 at 9 months. One old man of over 78 declared that the disease had only just appeared, and denied ever having until then any “blemish of the skin.”

HEREDITY.

These statistics do not lend much weight to the theory of heredity. In 1893 about 14 per cent. gave a family history of the disease, while the present tables show 23.8 per cent. It would seem that brothers and sisters are more often affected than the parents, and of the latter the father is more frequently stated to have had the disease than the mother, in the proportion of 3 to 2. Those who believe that psoriasis is a parasitic disease consider that the fact of other members of a family having occasionally the same complaint is as well explained by personal communication of the virus as by heredity, especially where, as in this instance, a direct history from parent to offspring is comparatively rare. It seems to me, however, that from other considerations we are justified in the view that although psoriasis is not a hereditary disease there may be a “family susceptibility” to its acquisition.

It was long taught, and is still widely believed to be the case, that psoriasis may be regarded as “the skin disease of good health,” and it is so far true that many patients complain of little or nothing else. A great number, however, in my experience do show evidence of more or less defective health or faulty nutrition, and in looking over my case-books I am surprised to find how often I have had to order digestive, tonic and other medicines—although not as specifics for the psoriasis. In my older statistics, only about 10 per cent. were especially noted as being otherwise ill; but the present ones give a ratio of nearly 31 per cent. (36 per cent. at the West London Hospital), and these figures by no means represent the number to whom medicines for constipation, debility, etc., have been given. Indeed, I am inclined to think that there is something constitutionally and functionally wrong in a very large number of the cases, although the symptoms may be only manifested by such common and comparatively trivial disturbances as constipation, defective excretion and the like. A rheumatic or gouty history has been particularly noted in about 10 per cent., and the bearing of this with regard to treatment we shall see directly.

Neuroses in these cases have been occasionally observed, including “paralysis,” chorea, sciatica, neuralgia, extreme nervousness, etc., but not in sufficient ratio to indicate any general etiological significance. Four cases were stated to have come after measles, three after scarlatina, one after small-pox, three after vaccination, one after erysipelas, one after typhoid, and one after gonorrhoea. Three cases had congenital xeroderma, two alopecia areata, one carbuncle, and one extensive furunculosis. Very severe rosacea was noted in one case.

TREATMENT.

Most of us, it must be admitted, still treat many diseases absolutely empirically, and we often cannot well do anything else. If we find that some particular method of treatment is successful in curing a disease, we are quite justified in employing that method, whether it bears upon this or that theory of pathogenesis, or whether it fits or does not fit in with the hitherto known pathological or etiological factors of the complaint. Our empiricism may be in one sense unscientific, but it is obvious that a rational treatment founded upon pathology and etiology can only be possible when the facts connected with these latter are quite certain. Now, as we have seen, we do not know the whole of the facts connected with the causation and true nature of psoriasis.

In olden times, internal medication was practically the only method of treatment irrespective of taking the baths at the various well-known and fashionable watering places. By degrees, external medication came into vogue, and in Germany it was for long chiefly relied upon. We must admit that patients have been cured—or perhaps, what is not always quite the same thing, have lost their psoriasis while under the treatment (psoriasis indeed sometimes disappears spontaneously)—by taking internal medicines alone, as well as solely by bathing in medi-

cated waters or by rubbing in ointments. We have to remember that a disease is not absolutely proved to be local or superficial because it disappears under purely local applications, or constitutional because it disappears under purely internal treatment. In the one case, we may have absorption of the drug into the tissues and blood, so acting internally; and in the other, the drug may reach the skin from within through the circulation, and then produce its effect.

I do not propose to enumerate the enormous number of medicines that have been used internally or externally for psoriasis. I shall allude to but very few and more particularly to those which I have myself found useful in combating the disease, and to the methods of their application which I employ. If I were asked whether external applications or internal medicines were most efficacious, I should reply undoubtedly the former. In my experience the eruption of psoriasis always disappears under tarry applications adequately used, and still more rapidly and certainly under chrysarobin, whether other medicines be given internally or not.

From what I have already stated, however, it will be gathered that I do believe that internal medication is often very useful in a great number of cases—that is, where there is the least suspicion of the uric acid diathesis, indigestion, debility, etc. In point of fact, I always employ vigorous external treatment, while at the same time giving whatever internal medicine that may be indicated.

I may here state that I do not believe that there is any one drug administered internally which can rightly be regarded as a specific for psoriasis. I am quite aware that this is a very heterodox opinion, and I always advise students, when going up for examination, not to say anything to this effect to the examiner, for they would run great risk of being "ploughed" if they did not state that arsenic was the specific for psoriasis.

In 1893 I ventured to express my doubts as to the efficacy of arsenic in this disease; I had seen so many cases which had been under its influence for years without the slightest benefit, and I had also seen a great many which had been cured without its use. I then wrote: "I cannot help thinking that, with regard to psoriasis, this arsenic 'tradition,' like the tradition of a great many other drugs for other complaints, will sooner or later become obsolete." My subsequent experience has strengthened this opinion. It must, however, be admitted that a great many experienced physicians—and even dermatologists—still put faith in arsenic for psoriasis; but I think I am right in believing that an increasing number of those who have most to do with the disease agree with me in this matter. I do not deny that arsenic may occasionally appear to benefit a patient—for example, as a nerve tonic in cases which have a neurotic complication, or that, when greatly pushed almost to the toxic effects, the eruption may sometimes temporarily disappear. A similar result is not infrequently observed during the existence of some intercurrent disease. I have more than once seen the skin get clear in a psoriasis case during an attack of gastritis, severe influenza, and other acute diseases. Anything, in fact, which profoundly alters the general nutrition of the system will at the same time affect the skin and its efflorescence, and the latter may vanish for the time. Under these circumstances, however, it very soon returns, in my experience, when the superimposed illness is over.

Another substance which with less doubt influences the nutrition of the skin, and sometimes has a beneficial effect on psoriasis, is thyroid gland. When Dr. Byrom Bramwell published his important observations on this subject, and reported his successful results in three cases, I at once made trial of the new remedy, and within six months had 65 cases under it. Only in a few of them did I note marked improvement; in considerably more than half the cases the results were either negative or the eruption actually increased while the thyroid was being administered. I very rarely order it now, and only in cases which "hang fire" and are under close observation as in-patients at the hospital.

In my experience, magnesium sulphate, with a little iron and some bitter tonic, is often useful in regulating the bowels, promoting excretion, and improving the general nutrition, and in every case in which there is the least suspicion of an excess of uric acid in the

system I give salicylates, salicin, and alkalies. Dr. Radcliffe Crocker some years ago published some good results in psoriasis from the exhibition of salicylates and salicin in large doses. I find them useful, especially under the circumstances mentioned.

As regards external remedies: my usual plan is to order a thorough soaking for at least ten minutes in a weak tar bath every day, to be followed by a copious inunction with some tarry ointment. I do not think it matters much what tarry substance one uses. I find creolin from gas tar convenient and as good as any. I generally order 3j to 6 gals. of water in the bath, and my favourite ointment, especially for indurated patches on the extensor surfaces, contains:

R Creolini 3j to 3ij.
Acidi salicyl. gr. x.
Hydrarg. ammon. gr. x
Lanolini.
Vasellini ad 3j.

I sometimes add soft soap 3ij to 3iij to this and occasionally sulph. precip. pur. gr. xv.

It need hardly be said that the proportion of the ingredients must be varied, diminished, or increased or some of them left out, in accordance with the special circumstances of the case, the idiosyncrasies of the patient, the parts affected, etc. Most cases yield to this treatment in a few weeks if copiously and thoroughly applied, but when progress is slow, I add chrysarobin gr. x to xx to the above ointment, that is, in in-patients or where the case can be adequately watched. In out-patients and in private practice I frequently rub in obstinate patches with a stiff brush chrysarobin in benzine, the parts treated to be afterwards painted over with flexible collodion. I prefer this application to the usual chrysarobin in traumatism. For psoriasis of the scalp my routine ointment, for a few weeks, is:

R Hydrarg. ammoniati 3j.
Saponis mollis
Vasellini, 3j.

with the addition sometimes of resorcin or some tarry oil.

Many cases do well at places like Harrogate, Aix, etc., and some even at Bath and Buxton, but, of course, ordering to watering-places is out of the question for hospital patients.

[The question of the differential diagnosis of psoriasis from certain cases of squamous syphilides, eczema seborrhoicum, pityriasis rubra, pityriasis rosea, lichen planus, lupus erythematosus, etc., which might be superficially mistaken for psoriasis, was then discussed.]

Remarks

ON

EYE ACCIDENTS AND COMPENSATION.

AN ANALYSIS OF A SERIES OF 170 CASES.

BY SIMEON SNELL, F.R.C.S. EDIN.,

OPHTHALMIC SURGEON, ROYAL INFIRMARY, SHEFFIELD; PROFESSOR OF OPHTHALMOLOGY, THE UNIVERSITY, SHEFFIELD.

At different times I have been requested to report on a large number of eye accidents, and especially since the Workmen's Compensation Act came into force. A consideration of such cases will show many points of interest and importance. In this article I propose to analyse about 170 consecutive cases. They are claims, saving a few, in connexion with the Compensation Act, the exceptions being cases in which a lump sum was sought to be obtained from a Friendly Society or accident insurance company. A few (5) were instances referred to me for report on soldiers seeking pensions after the South African war. It is impossible, as well as unnecessary, to discuss the cases in detail; it will suffice to mention some of them particularly and to give a general statement respecting the others.

As to the ages of the applicants there were 8 under 20 years, 44 between 20 and 30, the same number between 30 and 40, 31 between 40 and 50, 27 between 50 and 60, whilst those older than 60 were 2 aged 62, 3 aged 65, 2 aged 67, 1 aged 69, 1 aged 71, and 1 aged 73.

Nearly half of the claimants had been employed in the various occupations connected with the iron and steel industries, the total being 82. Forty-one were colliers, whilst the others represented many different trades.