The diagnosis and treatment of eczema / by Tom Robinson.

THE DIAGNOSIS AND TREATMENT OF ECZEMA

ROBINSON

Mit Herzlichen Empfehlungen

Oktober 1.87

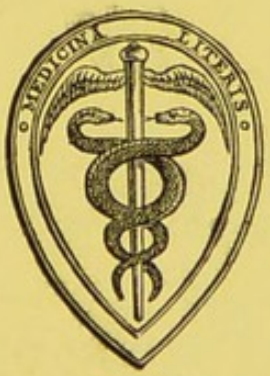
THE DIAGNOSIS AND TREATMENT OF ECZEMA

THE DIAGNOSIS AND TREATMENT OF ECZEMA

BY

TOM ROBINSON, M.D.

L.R.C.P. LOND., M.R.C.S. ENG.
PHYSICIAN TO, AND LECTURER AT, ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN



LONDON
J. & A. CHURCHILL
11 NEW BURLINGTON STREET
1887

TO

HENRY GAWEN SUTTON, M.B., M.R.C.P.

Dear Sir,

In dedicating the following work to you, I am performing an act of duty to a Physician who has greatly illustrated the nature of disease by the investigation of morbid processes.

I owe to you the warmest expression of gratitude for the enduring stimulus given to my medical career by your teaching, advice, and high example. I feel that, in adding to the almost boundless pages of literature on the subject of Eczema, I owe an apology for so doing. I also know that many of the thoughts expressed in the following pages have been used by others, and, when such is the case, I have endeavoured to trace them to their source. I make no apology for restating them, for Truth is eternal. As Sophocles has said, "No lie lasteth to see old age."

One object in writing this book has been to clear the ground of a number of words which are simply emblems of imagination. Science needs no adventitious adornment; and you, Sir, must have felt this when you say, in your helpful work on Medical Pathology, "I often feel that

I should like to take the students, myself included, and sit upon the earth naked, to know."

I have had a deeper purpose in view, and that has been to connect together the morbid processes which we find occurring in the skin and mucous membranes, so that we may be enabled to peep through the veil, and show that the causes of eczematous inflammation are identical with those that operate in all other forms of disease. I have in this tried to apply the words of Plancus: "Si quid intra cutem subest ulceris, quod prius nocere potest, quam sciri curarique possit."

To present the varied canvas of eczematous inflammation as an intelligible whole, to trace out the causes of this variety, and lastly, I hope, to relieve suffering, has been my earnest desire.

My best thanks are due to my friend Dr. Carter Blake, who has seen these pages through the press.

I am, dear Sir,

Faithfully yours,

T. ROBINSON.

9 Princes Street, Cavendish Square, W.
September 1887.

CONTENTS.

CHAP.		PAGE
I.	THE ECZEMATOUS DIATHESIS	1
II.	SYMPTOMS OF ECZEMA	12
III.	ÆTIOLOGY OF ECZEMA	34
IV.	THE DIFFERENTIAL DIAGNOSIS OF ECZEMA	57
V.	MODIFICATIONS OF ECZEMA	78
VI.	TREATMENT OF ECZEMA	112

ECZEMA.

CHAPTER I.

THE ECZEMATOUS DIATHESIS.

The words *temperament*, *idiosyncrasy*, and *diathesis* are used by us all, I fear, without attaching to them anything approaching to a definite significance. If we think for a moment, we shall not be surprised at this, because they in a certain sense have a similar meaning.

It will be well, before I enter on my specific subject, to define these terms, and in so doing it is right that I should acknowledge my indebtedness to Professor Laycock, Sir James Paget, and particularly to the lectures of Mr. Hutchinson, who treated the subject with masterly style in the lectures which he gave

on the "Pedigree of Disease" at the College of Surgeons.

I should define *temperament* as a state of organism which spreads throughout the life of an individual. For instance, we have the nervous, the sanguineous, and the bilious temperaments; these states are always present, and go with a man to his grave.

By *idiosyncrasy* I should indicate an organism which is influenced in a manner peculiar to itself and without reference to temperament. For instance, iodide of potassium will in some patients produce a violent coryza, or a copious eruption, which will in some instances be an acne, and in other cases a bullous rash. Common articles of diet will produce all the symptoms of a virulent poison in certain individuals. I may allude to hay fever, to the influence of mercury, the actions of the balsams, as parallel examples of a peculiarity of constitution which at present we are unable to discover by any outward sign, such as peculiarity of structure.

By *diathesis* I would indicate a tendency to a certain and fairly regular series of mani-

festations, which is coloured by the bias of a morbid state. For instance, we speak of a scrofulous diathesis or a gouty diathesis, by which terms we mean a sequel of morbid states which we recognize readily, and we are able to associate certain peculiarities of structure which accompany these well-marked constitutional states.

I have ventured to attach the words *eczematous diathesis* to a group of patients which constitute such a very large number of those who come before us for aid. The following picture will indicate the type which I have before me.

A patient, usually springing from parents who are the subjects of one of the forms of constitutional skin disease, is often in early life prone to chilblains, to a catarrhal condition of the mucous membranes, and to the advent of some form of irritation of the skin during cold weather. Sometimes the skin is also irritated by excessive heat. These skins are also made very pruriginous by the bites of insects, by east wind, by common soaps, and even by hard water. In point of fact, there is not a limit to the trivial irritants which will

be sufficient to bring out the proclivity which they possess. I know of an instance where the skin of the face is so exquisitely impressionable that the rays of light will bring out a copious vesicular eruption on exposure. It is not, however, the cutaneous area alone which so easily loses its physiological balance, but the mucous membranes are just as easily disturbed. It will be found, I think, that these patients take cold easily; they are prone to gastric, enteric, cystic, and aural catarrh; they often present a severe form of conjunctivitis, and, as age advances, they become arthritic. Their physical peculiarities are—a tendency to turn grey and become bald early in life; their teeth degenerate early, sometimes the incisors are pitted or marked transversely, they wear down, and fall out in some instances in a most unexpected way. The nails are also of great interest in these patients, and present many forms of malformation; in some instances they are marked by white spots or white transverse lines, they are pitted with small circular depressions, or they are marked by transverse furrows; the longitudinal flutings

are exaggerated in others. The shape of the nail is also of importance. It is often flat, sometimes even concave in its upper surface, and is frequently shaped like a shield; and they are often the subjects of early fatty degeneration of the cornea, constituting the state which is called *arcus senilis*.

A moment's reflection will enable us to recognize at once that all the manifestations which I have enumerated are due to a physical peculiarity in the structures of epiblastic origin. It is not possible to indicate with any precision what is exactly this morbid state; we can only say the epithelium is not capable of resisting external influences. Fortunately, there are many human beings who pass through life with epithelial structures which are not vulnerable to the influence of such an irritant as the east wind; on the other hand, there are many whose skin and mucous membrane assume a pathological state on the least provocation. Is it not strange that ordinary chicken-pox will in some children leave behind it ulceration of the vesicles which may last for many months, and some cases are on record where a gangrenous pro-

cess has been established in these spots, and the patient destroyed by the morbid action? Is it not a striking but a well-known fact that in some skins a mustard plaster, or the rubbing in of a liniment, will establish an eczema, which will spread with great rapidity to the opposite limb, and spread in a manner which is certainly not by continuity of tissue?

It is this difference in structure that accounts for the fact that in some children ringworm has a vesicated edge, whilst in other cases it is most certainly not the case.

There are many degrees of this tendency to break down in the epithelial structures, and this is why eczema presents so varied a canvas—why we have such names, *eczema impetiginodes*, *eczema siccum*, *eczema rubrum*, and *pityriasis rubra*.

If we examine our patients carefully, I believe we shall find that many cases of obstinate ulcers of the legs and many other equally troublesome affections (such as chronic discharges from the urethra, pruritus ani, and pruritus vulvæ, ulcers of the os and cervix uteri) occur in those who present other evidences of an unstable epithelium.

I have been seeing during the last few weeks several cases of an affection of the face which is usually known as *relapsing erysipelas*, which displays an erythematous condition of the bridge of the nose, spreading with more or less symmetry over the malar bones and going to the ears, and which is associated with a good deal of œdema of the parts and much smarting pain; the redness occurs in patches which are quite separated from each other, and which are not in all cases blistered, neither is the line clearly marked between the sound and diseased tissue, and, what is more important, there is very little, sometimes not any, elevation of the temperature. These cases relapse many times, and they often leave behind them, for a long time, a clumsy look about the features which constitutes a state in no way differing from elephantiasis.

The point of interest to me is that all these patients present other evidences of badly built-up epithelial structures. A case I saw the day I wrote this page had deep clefts behind each ear, very badly formed nails, and a most susceptible bronchial mucous membrane. I may add that on two occasions a

visit to Cromer has apparently induced an attack.

It is of importance, in treating of this diathesis, to recognize the fact that eczema has some peculiarities worthy of note. I should say my cases would indicate that anything approaching to a general eczema is only found in young children, or in those who have passed the middle period of life. This fact is probably due to the feeble resisting power which the skin and mucous membranes have during the periods of growth and degeneration. Is it not true that the young and the aged are those who are most liable to bronchitis?

During the middle period of life, in those who have an eczematous tendency, the disease is much more local.

The patches of eczema which we see, especially about the hands and wrists, but not by any means confined to these positions, do not assume large proportions.

The forms of eczema which we see on the scalp, or the outer aspects of the arms and legs, or between the scrotum and thigh, or in the flexors of the middle-aged, do not be-

come universal, probably because the epithelial structures are more stable ; and does not this help us to understand how it is that epithelial cancer occurs at the latter end of life, when degeneration of tissue is going on ? The eczematous process has always a tendency to perpetuate itself, and the longer the time has elapsed since its origin so much the more will our difficulty be in stopping the action.

I must not omit to allude to the power which some drugs, especially mercury and opium, have to induce an eczema in those who have the diathesis now discussed. Some articles of diet have the same influence, notably malt liquors and port wine. A patient of mine in the British Museum assures me that salt beef will invariably arouse an eczematous process in the clefts of his fingers, where I have treated him many times for an acute eczema. This is an example of the law which is known as pathological habit, whereby certain portions of skin become influenced in the same manner by the same cause. I think there is a great deal in the doctrine that the epithelium throws off morbid products. All the exanthemata are associated with manifestations in

the skin and mucous membranes. Syphilis, one of them, in no way breaks the law. Mercury produces stomatitis, because the cells break down under the strain of endeavouring to throw off the drug, and I suspect that many of the cases of the sudden outbursts of eczema are due to the epithelial structures endeavouring to eliminate the uric-acid compounds. The kidneys certainly do so.

The synovial membrane of the joints, which consists of a basement membrane and epithelium, would seem to be irritated by this effort, and this irritation induces a synovitis. The same line of reasoning would explain the attacks of bronchitis from which gouty patients so often suffer.

I would, in conclusion, express my belief that many more of the skin rashes will be best explained by recognizing the fact that there is in them all an inherited want of stability in the epithelium. The laws of inheritance are still obscure, and, after carefully recording and reflecting over many notes of cases, I am still unable to postulate what cutaneous manifestations will ensue in the offspring of parents who may be the subject of

some form of skin disease. I know eczematous parents with psoriatic children, and while I know of psoriatic parents with eczematous children, I see several members of the same family with different forms of skin manifestations.

The group of symptoms which I have endeavoured to picture are in many respects similar to those which Hardy designated dartrous, and which the older writers allude to as herpetic.

CHAPTER II.

SYMPTOMS OF ECZEMA.

Eczema is a diffuse inflammatory process of the skin, which process is driven in certain directions by structural peculiarities; but before any definite idea can be grasped of this disease, we must recognize fully what these structural peculiarities are.

I have previously ventured to sketch out a group of patients who might be described as having "an eczematous diathesis." I pointed out that this group embraced all who in the older medical books are designated herpetic; whilst more recently the French have classified them as "dartre," or as having the dartrous diathesis.

Mr. Hutchinson, in his lectures on the "Pedigree of Disease," called attention to the same group as having "the catarrhal diathesis."

I will not recapitulate my previous remarks, but briefly say that every patient who has the eczematous inflammatory process in action will also show evidence of a vulnerable and unstable epithelium, and that all the structures and organs which are of epiblastic origin will degenerate early; he will easily lose his physiological balance, and will have, on inspection, structural peculiarities which are easily recognized.

The skin will be either abnormally soft and hairless, feeling under the touch like china, or it will be hard and rough, feeling like leather. The teeth will be worn down like those of a horse, or they will be serrated, pitted, or marked by white spots; they will degenerate early, and often drop out suddenly and unexpectedly. The hair will fall early, and become prematurely grey. The nails will be of many shapes, and in many conditions: sometimes they are like a shield, and are flat; in other cases they are turned up like a shell, and are concave on their upper surface. The surfaces of the nail may be either rough like cocoa-nut matting, there may be transverse depressions, or they may be pitted like a thimble. In

other instances the nail is badly attached at the edge, and the free edge of the nail is often jagged, and is brittle. I may say, in passing, that many of those who bite their nails also have the eczematous diathesis.

The mucous membranes of these patients give them a good deal of trouble, and they become catarrhal, either in the ear, stomach, bronchial tubes, or elsewhere, with the least provocation.

I met last year a hospital physician of great clinical brilliancy, and he said, "How often do you find bronchitic people have eczema? what is your experience?" You will gather my reply from what I have previously said.

Catarrh and Eczema.—It has often been said that eczema is only catarrh of the skin; and I may take this opportunity of showing in what way it differs from what the laity know as a cold or influenza.

(1) Catarrh of mucous membranes runs a fairly regular course, and usually disappears spontaneously.

(2) The secretion in a case of catarrh of the mucous membranes is chiefly from the mucous glands.

(3) We do not find crusts or vesicles or pustules form in the course of a catarrh of the mucous membranes. The want of density and cohesion in the epithelial cells of mucous membranes renders these phenomena impossible.

It is extremely probable that we shall, in the future, speak of the eczematous process, or the eczematous inflammation. The canvas presented by eczema is so varied, the pathological processes at work are so diverse, that to speak of eczema as a clinical entity, is as misleading as such a word as "biliousness." We must recognize this before we can hope to gain an insight into this interesting state; for, if we expect to find one peculiarity, such as we see in the silvery discs of psoriasis, always associated with eczema, we shall blunder, and be disappointed.

Just imagine what confusion would ensue if we were to take any one of the physical signs which occur in scrofula, and expect this one sign to be always present in this condition of the organism. The scrofulous inflammation, the low and slow and often destructive processes which go on in scrofulous persons, are

as varied as the sky. Notice how a sprained joint in the victims of this malady becomes a "white swelling." Remember how a trivial injury to the hip will start an inflammation in the joint which will go on to suppuration, and to destruction of bone and of cartilage. Call to mind the many cases which we see of slight blows on the long bones leading to necrosis. And let us think how a common catarrhal state of the bronchial mucous membranes will drift into a phthisis in those who inherit a scrofulous tendency. I am not forgetful of the fact that a bacillus is now believed to be the actual agent which produces all these morbid conditions. But the presence of a micro-organism does not account for the narrow chest, the sloping ribs and shoulders, and the long thin bones of a man who is said to have a phthisical tendency.

The analogy between the eczematous inflammation and the scrofulous inflammation has not escaped the observation of other writers on eczema.

The late Sir Erasmus Wilson used to speak of eczema as an abnormal inflammation.

Those who have assisted me in the practice

of St. John's Hospital will recall how we often say such and such a patient is eczematous, or "he has an eczematous diathesis," or "he is prone to eczema," or "he has a vulnerable epithelium," or "he is catarrhal." Such phrases would be incomprehensible to many, I do not doubt; but to us, at least to me, they convey a very definite significance, as definite as such a phrase as cancerous cachexia, and with us they are current coin.

I may be asked to state more definitely what I mean by this histological peculiarity. Where is this want of integrity? is it in the blood, the lymph, the nerves, the epithelial cells? I say, I do not know. But it would surprise me very much, if we did not find evidence of want of power of resisting morbid processes in all these structures.

I do not claim all the views which I shall here state as being original. Hebra was undoubtedly the first dermatologist who got away from Willanism; he, with that love of truth which characterizes so markedly all he ever wrote, soon discovered that eczema was not "always a vesicular eruption, the secretion of which stiffened linen." And in England

we owe very much to Sir Erasmus Wilson. His description of eczema given in the theatre of the College of Surgeons is sketched with a masterly hand; in fact, I do not know of any writer who described clinical aspects so vividly as Wilson. He was the Charles Dickens of our profession. Across the Border, Anderson has obviously been governed by these two masters, and has given us in his volume on eczema a most comprehensive, accurate, and useful work. I acknowledge here my indebtedness to these writers, and I feel at times that I do not know how much I owe to their teachings. Mr. Hutchinson has not, to my knowledge, written any treatise on eczema, but he has touched upon and lighted up the subject by many references which we find scattered through his works.

It will be necessary now to state categorically the peculiarities of eczematous inflammation. They are:—

I. Usual tendency to persist.

II. When the eczematous surface is pressed upon, a yellow stain remains.

III. The inflammatory process has an indistinct line of demarcation.

IV. Itching is always present.

V. The initial lesion may be either a congestion, a vesicle, a pustule, a papule, or a fissure.

VI. When cured, it does not leave a scar behind.

VII. It is always associated with effusion into the meshes of the skin.

VIII. Eczema seldom becomes universal during the middle period of life.

IX. There is always the formation of scabs, fissures, vesicles, or scales.

X. Eczema is never congenital.

XI. It is not contagious.

Let us take each of these characteristics, and ascertain, if possible, their true significance.

I. *The usual tendency to persist* in eczema is certainly one of the great reasons why we are so often consulted about this malady. Let me illustrate the point by the following case :—

A. G., aged twenty-one, a young farmer, said : "I have had scurvy on the back of my hand for three years, it itches very much, and is worse in cold weather." My note says : "He has on the wrist, over the posterior aspect of the head of the radius, a patch of

eczema; there are other patches between his fingers. The disease is limited to the positions stated. No other member of the family has the disease."

Again:

J. B., a child four years old, came to St. John's Hospital with the following history:—"When a baby, had cradle-cap; this could not be removed until it was washed with soft soap, after which it became a running sore, and spread all over the body. The child scratches itself very much; if the hands are tied, he will rub his head on the pillow. Had measles, and when the measles was out the eruption disappeared, but it returned immediately the disease was over, and has remained as bad as ever. The child wheezes a good deal, but is otherwise well.

"*Observations.*—The child has fair hair and blue eyes; the veins in the eyelids are abnormally visible. He has eczema of all grades pretty universally, but the disease misses the eyelids, the tip of the nose, the palms and soles, and pubis."

This tendency to perpetuate itself which we see in eczema is most probably due to a

want of cohesion between the epidermic cells. In a healthy skin inflammatory action is checked by a barrier of organized lymph ; this is how erysipelas or cellulitis becomes limited in its action, and this want of resisting power will help us to understand how it is that these diseases and syphilis will in some organisms go on unchecked, and in one disease give rise to the condition which we know as phlegmonous, in the other phagedænic. And I think, from my own observation, that some fatal cases of erysipelas seen by me have occurred in those who have the eczematous diathesis.

II. *When pressed upon, a yellow stain remains behind.*—It will be found, if we meet with an erythematous condition of the skin which is not eczematous, that we can press out all the coloured blood-corpuscles, whereas, in the first degree of eczema, instead of the natural cutaneous colour remaining, we see a distinctly yellow aspect. This yellowness is due to disintegration of the red blood-corpuscles.

This simple test is often of signal service in determining the diagnosis between a

transient inflammatory process and a permanent eczematous action.

I ought to say that in eczema, more particularly towards the termination of the malady, when a cure is being effected, we shall find mixed with the islands of eczema patches of simple erythema.

III. *The inflammatory process has an indistinct edge.*—We are often a good deal puzzled in making a diagnosis in old cases of psoriasis, or lichen ruber, or simple erythema, and I have found the indistinct edge an assistance. The edge of an eczematous patch shades off into the surrounding tissues gradually, and is never sharp and distinct.

I must qualify this by saying that the condition which we know as eczema marginatum—the local eczema which is found between the scrotum and the thigh—has a distinctly marked edge. This applies with equal force to common ringworm. At this we need feel no surprise, because both maladies are due to a mould fungus, and in very many cases the edge of common ringworm is vesicular. It has been said the ringworm patch always has an eczematous margin.

IV. *Eczema always itches.*—The itching may be very intense, or it may be mild. It may be constant, or it may come in waves. Any condition which determines more blood to the part increases the itching. This is why the friction of the clothes increases the itching; why flannel and other coarse garments increase the trouble. Stimulating foods, alcohol, the heat of a fire or the heat of the bed, set up the irritation. And it is curious to notice how our patients seem to revel in the scratching. They will dig their nails into their flesh, and produce long scratches right down to the papillæ. They will tell you they prefer the soreness to the itching. An old clergyman I attended last year said, "I will scratch myself; what is the use of having nails if I may not use them?"

When the eczematous inflammation attacks structures which represent the transition between skin and mucous membrane, such as the vulva, the sensation becomes crawling and sickening, which is most distressing, and which drives many women from society.

When the skin is fissured, as we see in eczema rimosum, instead of itching we find positive pain.

In the early stages of eczema we find our patients complaining of a burning more than an itching.

I would take this opportunity of saying that scratching is a great producer of eczema, as it certainly is a most difficult act to abolish. And I may call attention to this fact, that we are not able to localize the irritant applied to the skin. If a man with an itchy skin is bitten by a flea, he is not able to convince himself for some time that he has not a swarm of fleas on his body. So it is with eczema. A local irritant—it may be a liniment, or a chafe, or mustard—starts the eczematous inflammation in a certain spot. Itching occurs, and this itchiness spreads over the cutaneous area.

It is interesting to notice, in passing, how uncertain people are in localizing any internal lesion. A patient with blood-spitting cannot tell you where the blood is coming from ; as a rule, he selects the wrong lung.

Scratching as a cause of cutaneous mani-

festations must always be present to the dermatologist; and it is often a good plan to get out, so to speak, in studying a case of skin disease, the primary lesion, and then trace the effects of prolonged or vigorous scratching.

V. *The initial lesion may be either an erythema, a vesicle, a pustule, a papule, or a fissure.*—Let me take the first form, and illus trate it with a case. A young woman came to the out-patients' department of St. John's Hospital with patches on her face, which had existed for many months, which itched very much, and which had never disappeared. I found, on inspection, islands of skin on the cheeks, brow, and neck, which islands were thickened, slightly scaly, and shaded off into the surrounding tissues. When pressed upon, the mark left was distinctly yellow. This young woman had bad teeth and shield-shaped nails. At no time in the course of the disease had there been vesicles or pimples.

Here we have all the qualities of an eczematous inflammation which began as a simple erythema.

Again :

A man I attended with Dr. Andrews had œdema of his legs, caused by malignant disease of his kidney, involving several glands and pressing upon the veins. This poor fellow suffered from the most troublesome itching of his legs, and he had the indistinct line and yellow pressure-mark of an eczema, but he never produced vesicles, pustules, or papules.

The cases which are known as pityriasis rubra are examples of erythematous eczema.

The initial lesion may be a vesicle.—I suppose, strictly speaking, the initial lesion is always an erythematous condition ; but the formation of vesicles in some cases of eczema is so rapid that within twenty-four hours of exposure to the irritating cause we find a copious crop of vesicles. Take this as a typical case :—

My partner, Dr. Sumner, treated a young woman for myalgia of the sterno-mastoid and platysma muscles (common stiff-neck), and he ordered hot belladonna fomentation. Within twenty-four hours the fomented situation was spattered with a vesicular eruption, which spread down the arm, and had all the

characteristics of an eczema. Many of these vesicles became pustular, as I believe to be always the case. The vesicles developed are of different sizes; in some situations, where the epidermis is thick and tough, many of them will run together, and form blebs as large as gooseberries, but usually they are about the size of No. 8 shot, and are of different shapes. If they occur around the follicles of the skin, they will be funnel-shaped; but if they are simply elevations of the epidermis, such as we see after a blister, they will be round and oval-topped. These vesicles do not long remain unbroken, but several successive crops may, and often do, occur. When infiltration of the skin ensues, they usually cease to be produced. This is the form of eczema which is most likely to be mistaken for scabies, and has given rise to a good deal of discussion. I should feel disposed to believe that in scabies the vesicles occur only in those positions where the itch-mite burrows into the epidermis, so that the vesicles are always isolated, whereas in eczema the vesicles occur in clusters. We shall also derive great assistance from the

tendency the itch-mite has to travel, and to nestle down in such positions as the flexors of the joints, the axillæ, the umbilicus, the penis, and the folds of the buttock, and its contagiousness. The discovery of the acarus scabiei will always settle the diagnosis.

The initial lesion is a pustule.—We see the best example of this form of the commencement of an eczema in the hairy portions of the body, notably the head and chin, where the disease is called by some authors—in the first instance, impetigo capitis; in the other, impetigo menti. Other authors group all these conditions under the compound word, eczema impetiginodes. I saw an American, who afforded a good example of this condition. The whole of his moustache was glued together by the pus and serum from the ruptured pustules; in many instances the pus could be seen surrounding the hairs. I have seen this form of eczema arise on the pubis, in the axillæ, and on the outer aspects of the arms and legs, but I have not seen primary pustular eczema on the trunk or flexor surfaces of the limbs.

The initial lesion may be a papule.—This

form commences as isolated papules, which papules run into each other, forming rough, elevated patches, with considerable thickening of the skin. We meet with the best examples of this form of eczema in the outer aspects of the limbs or in the popliteal spaces. It is not an easy matter, when these cases are first seen, to be sure that we are not dealing with common lichen spots; but, if we prick the papules, we shall let out a drop of serum; and if we examine them by a side light, we shall see they are semi-transparent. These papules undergo changes, which lichen does not.

I ought, perhaps, to add another initial form to those to which I have already alluded, namely, the variety in which the primary lesion is a fissure. I allude to the clefts which we see about the flexors of the joints—to the ordinary "chapped hands" of the laity.

I must here pause, and say that in by far the majority of cases of eczema which we examine, we shall discover all these forms of eczematous inflammation present. At least this is true of those instances where the disease has become general. Probably the

initial lesion is largely subservient to the position attacked; the structural peculiarities of the part give the impetus to the variety.

But I must also be careful to say that we may, and we do, find the various forms present in the same patient and at the same time; and it is this fact, this polymorphous character of eczema, which so puzzles the beginner.

VI. *Eczema does not leave a scar behind.*—The late Mr. Startin used to say the skin often seemed to be finer and softer after an attack of eczema, and it is not a little surprising to see how completely the skin recovers after the most violent eczemas. I am quite aware that many of the cases of eczema which we see in those who have varicose veins pass into deep ulceration—and here we advance beyond the limits of the subject—and in such cases scars must ensue. I may say here that I believe the disease which is known as lupus erythematosus is an eczematous process, and in the wake of this disease we always find superficial scars.

VII. *Eczema is always associated with effusion into the skin.*—This infiltration of the tissues is due to an excessive quantity of

the serous portions of the blood escaping through the walls of the vessels into the meshes of the skin. This infiltration is recognized by pinching up a fold of skin and comparing it with a fold of healthy tissue. The eczematous skin will feel thick and clumsy, and will retain the form of a fold which we bring about by pinching up. This is especially noticeable about the eyelids. In other positions where we find the skin naturally hangs in folds, in such positions as the folds of the buttock, the root of the neck, or the axillæ, this infiltration becomes in some cases enormous, and the skin is as rough and rugged as the dewlap of a cow. In other positions the condition is misleading. Thus the perinæum, when eczematous, is as smooth as a piece of old china ; this is especially the case after the disease has been in existence for a time. The scrotum, when eczematous, usually commences as a vesicular eczema ; but where the condition has gone on for a time, the scrotum feels like stiff paste, and will retain itself in a roll like the loaves of fancy bread we see in bakers' shops.

It amounts to this : where there is much

loose cellular tissue we shall see the greatest infiltration.

VIII. *Eczema does not become universal during the middle period of life.*—If we note carefully, I believe we shall find this is a general clinical rule. There certainly are a few outbursts of general eczema with which we meet in middle age—cases where the whole cutaneous area is involved, where there is most copious shedding of epidermic scales; cases where the nails and hair are sometimes cast off; and cases which are probably due to a blood state. I saw such a case with my friend Mr. Greet. The man had the aspect of one who had scarlet fever, but there was no elevation of temperature; and I may add, the man wasted, his digestive power failed him, and he died.

Notwithstanding these exceptions from my experience, I should postulate that eczema caused by external irritants only becomes universal in the period of life when the tissues are degenerating, and when the tissues are developing.

IX. *There is always the formation of scabs, scales, vesicles, pustules, or fissures.*—It will

be gathered from what I have already stated, that it is usual to find all these manifestations present. The scabs vary much in colour and consistence—vary according to the products which make them up; thus on the scalp they are generally thick and soft and offensive, because the eruption is here pustular and is mixed with sebaceous matter, whilst in some cases, where the part is kept clean, the scales are semi-transparent, and can be stripped off like gold-beaters' skin. In other instances the scabs will be dark brown, or even black, owing to the admixture of blood with serum and pus.

X. *Eczema is never a congenital disease.*—This is one of the conditions we may always be perfectly certain about. There are only two congenital skin diseases—ichthyosis and pemphigus.

XI. *Eczema is not contagious.*—We must qualify this axiom with the remark, that the secretion from an eczematous surface will, in those who have an eczematous proclivity, in rare instances produce a true eczema. I have known more than one instance where this has occurred.

CHAPTER III.

ÆTIOLOGY OF ECZEMA.

The cause of ill health must always be of importance and of interest to all whose province it is to investigate disease. We have only to think over the older writers of our guild, and to notice how they were struck with the necessity to study the causation or ætiology of disease.

This subject is here of essential importance, because, by discovering the origin of an eczema, we are able in many instances to point to the cure. It is a pathological truism that **idiopathic eczema**—that is, eczema without an irritant—is never met with, any more than is idiopathic inflammation of a serous membrane.

In my last chapter I ventured to state my belief that eczema is an inflammatory process, which is modified by structural peculiarities;

also that an eczema may commence as a simple erythema, a vesicle, a pustule, a papule, or a fissure; and that we very commonly find all these conditions associated in the same individual and at the same time. To use a simile which will help me, I described the canvas on which the eczematous picture was painted. I sketched, as well as I was able, what these picture peculiarities were. It will be my pleasure in this chapter to investigate the different brushes or causes of the production of the picture.

I would divide the ætiology of eczema primarily into two large groups:

A. Those which are due to internal,
B. Those which are due to external causes.

Hebra spoke of these as known and unknown. It has been denied by some dermatologists and pathologists that eczema is ever produced by the presence of a morbid material in the blood. For my own part, I believe that bile and the uric acid compounds are able to produce so much irritation of the cutaneous surface that they not infrequently set up an eczema, involving a large area of the

skin. Let me illustrate my position by the recital of a case.

W. F. M., aged sixty-two, has had repeated attacks of true gout and bronchitis. In the month of June 1882 he burst out into a copious vesicular eruption, which itched very much. I saw him about three weeks after the seizure. He then had vesicular and papular eczema of legs, arms, and trunk; the eczema was symmetrically distributed, and appeared as a general eruption.

The urine of this man was of high specific gravity, and contained uric acid and its compounds. I have seen several parallel cases to this one. We also see instances of eczema induced by storms of uric acid in young children. A great many of us forget this. The urine of children should invariably be examined. Their freedom from any but the acute inflammatory diseases of the kidney probably leads us away from such examinations. Still the clinical fact remains that young children very commonly do pass large quantities of uric acid; and I have known, in two instances, all the symptoms of stone in the bladder induced by the presence of these

crystals. My point is, that the presence of uric acid and its compounds in the blood will induce an eczema in the young—an eczema which will suddenly burst out and involve both sides of the body, and which will yield to the ordinary remedies for gout.

Robson Roose, in his able work on Gout, draws attention to the association of gout and eczema, and in this view he is supported by Wyndham Cottle, Dr. Piffard, and Dr. Garrod; whilst Dr. Golding Bird has observed crystals of urate of soda scattered like fine hoar frost on the parts on which the surface exudation had dried.

I am also disposed to believe that in cases where the kidneys are granular, or their excretory power is diminished from gross pathological changes, that the extra work which is thrown upon the bronchial mucous membrane and skin, will in one case induce a bronchitis, whilst in the other an eczema is produced. I attended some years ago, with my friend Mr. Greet, a man with uræmic convulsions, and in his case a most typical and general eczema appeared actually during the period of his convulsions.

During the course of rheumatic fever the sweating will very commonly call into action the unused sweat glands and produce sudamina; and on more than one occasion I have known this to pass into a permanent rash with effusion into the skin and great irritation. In point of fact, excessive sweating from any cause will sometimes give rise to the same clinical events.

The administration of opium and the balsams will also produce eczema.

A good deal has been written respecting **mercurial eczema**. I confess I have never met with a case in which the internal administration of this drug has ever set up an eczematous process. The rubbing in of mercurial ointment will, in those who have the eczematous diathesis, frequently produce eczema. In these cases, probably any irritating application would have brought about the same result.

This will be a suitable place to discuss the influence of **diet** upon the skin—at least, so far as the production of eczema is concerned.

The precise *modus operandi* of this cause and effect is not clear. Practically, I know

eczematous patients who assure me that salt beef, curry, highly spiced foods, alcoholic drinks, especially champagne and port-wine, will light up an old eczema; whilst others have told me that shell-fish, raw fruit, and uncooked vegetables will have the same effect. We have a parallel result in the variety of foods which will produce **urticaria.**

Mr. Hutchinson tells us, in his work on "The Pedigree of Disease," that many cases of infantile eczema have made a quick recovery when he has suspended the milk diet.

I must allude to another group of eczematous cases, which we may usefully designate **see-saw eczema.** One instance which I will relate affords a good instance of this class:

"An old lady, seventy years of age, has had eczema alternating with diarrhœa for over forty years. I watched her for several months, and it was most interesting to notice how regularly the same thing occurred. On three occasions, after administering astringents and sedatives, I succeeded in checking the diarrhœa. Simultaneously with this there burst out a copious crop of acute ringed eczema. I now directed my attention to the

eczema, and after this had passed away the diarrhœa returned. It is interesting also to observe that my patient preferred the diarrhœa to the eczema.

I should be sorry for any one to conclude that I believed real harm ever came from curing, or, as the laity say, driving in an eczema. On the contrary, I have seen often a great gain in the way of health and strength after an eczema has been cured.

We have all probably seen small-pox, measles, scarlet fever, and pulmonary affections occur in the subjects of eczema, and, as is usual in such cases, the eczema is arrested, but always returns when the acute intervening malady has terminated. It is because of this return that I have always opposed the vaccination of eczematous children. An opinion floats about in the public mind, and I believe amongst some members of our own profession, that an eczema is cured by vaccination. Such an opinion I should say, from my own experience, is a false one, and I believe the false judgment has crept into our thoughts, because it certainly is true that an acute infantile eczema does disappear or become

modified by vaccination, but it is also true that the eczema returns after the vaccine has run its course.

I have been anxious to discover what influence pregnancy has upon the course of eczema, but after looking up a number of notes bearing on the subject, I should say it is not possible to state what effect conception will have upon the eczematous. One patient I saw, assured me that an eczema often heralded in her pregnancy before she had an indication from any other cause, and that this eczema, which occurred on her face, disappeared within a week of her confinement.

Another instance I met with, in which the patient told me that an eczema about the wrists and hands disappeared during her pregnancy, and the period of suckling; but returned only when her child was weaned.

We find the same erratic action of the pregnant state upon the other constitutional skin diseases.

We now pass on to a much wider field of observation—*i.e.*, the *external causes of eczema;* and for the purpose of description I shall

deal with these causes under the following heads :

I. Activity in the tissues.
II. Obstructions to the circulation.
III. Discharges from orifices.
IV. Irritation produced by animal parasites.
V. Irritation produced by vegetable parasites.
VI. Friction.
VII. Pruriginous states and scratching.

I. *Activity in the tissues.*—The effect of the seasons upon all affections of the skin and mucous membranes has always attracted the attention of both the laity and our profession. I am not aware of any statistics as regards skin diseases which assist us in this proposition, but every-day experience convinces us of its truth. We have ample evidence from the Registrar-General's Report that the mortality from pulmonary affections runs a fairly regular course; and those who have to observe diseases of the skin must notice how many of the patients with constitutional skin diseases come year after year; and one cannot help noticing that this often occurs in the spring of the year.

To obtain a clue to the influence of the

seasons upon eczema, we must recall the remarkable natural discovery which was made by the late Mr. Milner, while he was acting as Medical Superintendent of the Convict Establishment at Wakefield.

Mr. Milner made his observations upon over 4000 men, ranging from fifteen to sixty years of age. They were fed on the same food, and lived the same lives as regards clothing, temperature, and exercise. Mr. Milner found in the first months of each year—January, February, and March—the bodies of these men underwent a gradual process of wasting, the loss of weight being as 0.14 in January, 0.24 in February, and 0.95 in March. The month of March past, a change took place ; the body in each case began to acquire flesh, and continued to maintain this state until the end of August. When August was past, there was again waste of body.

The lesson taught by the facts recorded is, that we are all subject to certain recurring influences which produce the most marked physiological action even on those in health. The lesson becomes more impressive when it is taken in connection with disease.

Now it is an accepted axiom that every tissue and every organ which is in a high state of activity, is the first to feel the influences of external or depressing causes. We see examples of this in the vulnerability of the organs of the young. A small bar of iron will throw an express train off the metals, whilst a slow luggage train would pass safely over a similar object. Just so is it with the epithelial structures during the spring of the year, those months when all Nature takes a leap. The gardener will tell us that the east wind cuts his trees, as he puts it, in the spring, at other seasons it does not harm them ; and it is just at this time, when the epithelial structures are growing rapidly, when cell proliferation is most active, that we find so often the commencement of an eczema in the bursting out of a psoriasis ; and it is at this season that we find the prevalence of the eruptions in the face and hands, which the laity call chaps. We must not attribute these eruptions to the effect of weather, at least in every case, because the skin has probably been exposed to temperatures quite as low at other times. The activity which

occurs in the hair system at the age of puberty will, in those with the eczematous diathesis, sometimes be a sufficient irritant to set up an eczema. Many cases of physiological acne are associated with eczema. The growth of the hair on the summit of the crown in infants will commonly begin an eczema; or, to be accurate, the production of a cake of seborrhœa in the scalp. The cradle-cap of nurses very often is the starting-point of an eczema. I admit the vigorous action of the nurse in rubbing off this cap is an important factor in the process.

I do not wish it to be understood that I postulate that every case of eczema is worse at the spring-time of the year; I merely assert that we do find such the case very frequently.

II. *Interference with the circulation.*—I allude chiefly to the congestion which is the result of pressure; strictly speaking, every case of eczema is due to an altered state of the circulation, or, in other words, to congestion. The group I am now discussing includes all cases of eczema which occur in the lower extremities, and which may be due to

varicose veins, to the gravitation of blood, the result of failing heart power, to pregnancy, or tumours in the abdomen or pelvis, or dropsy arising from any cause. These all produce too much blood in the capillaries; the serum and leucocytes, which are in excess of the quantity required for the healthy vital processes, gradually push up the epidermis, and so produce the usual train of symptoms which we know as eczematous. I need scarcely say that many individuals have congestion and œdema of the legs for months without producing an eczema. The special type of inflammation is modified by the anatomical peculiarity of the tissues.

The conditions which we know as **pruritus ani** and **pruritus vulvæ** are eczematous inflammations attacking structures which are connecting links between skin and mucous membrane; in the case of the anus they are usually associated with piles, and in the case of the vulva they are frequently troubles of pregnancy or occur in the diabetic.

III. *Discharges from orifices.*—I need only allude to the eczema which we see set up so commonly by muco-purulent discharges from

the nose, ears, eyes, or vagina, as examples of this group.

Excessive and prolonged salivation will produce an eczematous state of the lips. Anderson mentions such a case, and I have seen one child who had for many months a constant dribbling of saliva over the chin, which had induced an eczema, and a most vividly inflamed one.

IV. *Irritation produced by animal parasites.*—The itch mite, the pubic, head and body louse, the bug, the flea, the harvest bug, or *Acarus*, will all set up sufficient irritation in many patients to produce an eczema.

V. *Irritation produced by vegetable parasites.*—The mould fungi will also produce sufficient inflammatory action on some skins to produce an eczema. A great many cases of sycosis of the beard, of ringworm of the head and trunk, will be found to be distinctly eczematous. The disease which we know as **eczema marginatum,** is confined to the male sex, and comes between the scrotum and the thigh; it is always due to the settling down and the growth of a tricho-

phyton. In fact, any eczematous process which has a distinct line of demarcation, which has a raised edge, and sometimes a sound centre, will be found to be due to the invasion of a mould fungus.

VI. *Friction.*—The rubbing of two surfaces together, such as we meet with below the breasts of fat women, or in the folds of fat on the abdomen, the folds on the neck, or between the fingers and toes, will offer common localities where an eczema, the result of friction, is met with. Herein sweating also plays its part.

Friction between any articles of clothing, such as tight trousers or small corsets, will start an eczema, as also will the irritation from the use of certain instruments; carpenters and others who hold tools in the hands commonly generate an eczema; and, as Hebra has pointed out, continuous pressure, such as occurs in those whose occupation is a sitting one, will start an eczematous process. We meet with the same result in those who are bedridden, and who have to remain for a long time in one position.

The wearing of trusses, belts, garters, braces,

and suspensory bandages are common causes of eczema.

There are, however, three positions where we meet frequently with eczematous processes the result of friction, and I will take them in the order of their frequency—*the wrist*, *the ankle*, and *the neck*.

The form of eczema which we meet with about the wrist commences, as a rule, over the head of the radius of the right arm. It is just in this position where there is the most movement, and where the shirt and coat or dress cuff rub the part. What is equally important, it is a part easily scratched.

About the ankle we have to consider the mechanical irritation produced by the trousers and by the boot-top ; and we must not forget the presence of varicose veins and the free movement of the part.

About the neck we have the irritation produced by the collar and coat rubbing the surface of the skin. Rough frilling will also commence many an eczema.

I ought to allude in this place to the *brow* as the common home of an eczema induced by the friction of the hat. I have seen many

cases amongst soldiers of eczema of the brow induced by wearing a helmet. And very obstinate they are.

It is impossible to do more than glance at the many sources of irritation which may influence the cutaneous area. Heat and cold, hard water, many varieties of soap, dyes, wind, sun, sand, the application of any blister, mustard, turpentine, lotion, liniment, or ointment—all these and many more will in some skins produce an eczema. It is interesting to notice, in passing, that the same irritant will influence the skin in different degrees at various times.

There is one group of cases to which I must call attention—those induced by too vigorous friction with rough gloves, flesh-brushes, and even pumice-stone. The extravagant manner in which people rub the surface of their body day after day is frequently sufficient to produce an eczema. Sir Erasmus Wilson probably over-shot the truth when he advocated complete rest of the skin in the treatment of eczema; but I am equally certain that we order too many baths in eczema. If the friction from cloth-

ing is sufficient to produce an eczematous inflammation, surely the vigorous and pitiless rubbing and scrubbing of the skin day after day will produce the same malady.

We should ask ourselves this question, How does an eczema spread? We find the following a common bedside experience:—

A patient with the eczematous diathesis applies a liniment, a lotion, or a mustard plaster to relieve pain, and in from two to four days the seat of this application becomes eczematous. Around the edge will be discovered a crop of vesicles, with intolerable heat and itching. But the process does not stop here, for we find the eczematous inflammation occurring in remote parts of the cutaneous area—parts not connected by continuity of tissue. This eczematous inflammation has always a tendency to attack symmetrical positions. The same irritant may be simultaneously applied to either side of the body, and produces analogous results. We see examples of this in eczema induced by sea-bathing, eczema induced by washing in strong soda-water, and many other examples.

I have always believed the nervous connection to be the cause of the sporadic nature of the process. If a flea bites an individual with an irritable skin, we shall find the itching is not limited to the situation attacked by the insect, but the sensation spreads over a good deal of the cutaneous area. Your patients will say, and I have even heard my medical friends assert, "they itch all over after one of these domestic pests has been at work."

It is just so in the case of an eczema. An irritant is applied to a given spot: an eczema is set up, this eczematous irritation is reflected over the cutaneous area, and the scratching produces the eczema.

It is interesting to notice how these patches of eczema mimic the parent one as regards type and position.

In the case of pustular eczema, the tendency to spread is equally marked, but has not such a symmetrical distribution. The laws of pus contagion come into play in such cases.

At the risk of being thought tedious, I must revert again to scratching as an agent in the production of eczema.

I have been much impressed by the ingenuity displayed by some patients in the mode in which they have scratched the skin. I have seen an intelligent man sit all day long with only his shirt on, so that he might the more easily tear up the epidermis with a stiff hat-brush, which he had fixed on to a walking-stick. I have seen combs, rough flesh-gloves, or a cut lemon used to allay itching. I have seen young children whose hands I had muffled rub their cheeks on the pillow. But by far the most common agents in scratching are the hands and feet.

Patients scratch in two ways with the hand. Where the irritation is local, the thumb is used as a fixed point, and the fingers trailed across the skin up to the thumb. Where the irritation is over a large surface, the four finger- and thumb-nails are carried up and down the skin of the extremities or across the abdomen, leaving lines which in one instance will be urticarious, whilst in another case they will be covered by a blood crust; in others, as Hebra has pointed out, where the skin has been

for a long time inflamed, the papillæ, being enlarged, are raised above the level of the surrounding tissue; in the process of scratching their apices are torn off, and they are capped with a blood crust.

Unless we have had close experience of itching, we can scarcely imagine with what riotous pleasure pruriginous patients scratch themselves. They will very often dig out with their nails the papillæ and hair follicles; in point of fact, the sensation of smarting is preferred to the sensation of itching.

In estimating the influence of scratching upon the course of an eczema, we must always bear in mind the question of situation. It will be found that eczema produced by scratching with the hands, occurs in those positions which are the most readily scratched. The outsides of the arm above the elbows; the front of the trunk, especially below the umbilicus; across the loins, and the top and backs of the shoulders, but most commonly over the head of the radius and on the extensor surfaces of the fingers—all these are common positions for an eczema to be seen.

Equally interesting is it to notice how the feet are used in scratching and producing an eczema of the legs. It will not infrequently occur that our patients will deny scratching with their feet, even when we see evidence of such an act. Others will say, "I do it when I am half asleep." This much at least is true: if the irritation is on the outer surface of the leg, the toes and instep of the opposite foot are brought into action.

If the irritation is on the dorsum of the foot or on the inner side, the opposite heel is used.

If the irritation is on the front of the leg, the tendo-Achillis and heel are used.

We must not forget the action of the toe-nails. We shall commonly find pieces of epidermis torn off in cases of eczema of the legs, and very commonly the nail of the great toe has been the instrument used.

We must also remember that patients very commonly scratch their legs with their fingers.

Eczema and Teething.—A belief is floating about in the minds of both our own profession and the laity that the natural physiological process of teething will produce an eczema. It is scarcely possible to treat such a belief

with gravity. The fact is, we see an eczema during the process of teething, but that it is in any way produced by this process, or even modified by it, is absurd. Any close observer may convince himself that this malady occurs just as much after as before dentition, as Hebra points out so forcibly: "As great abuse is made of the teething of children as of their temperaments, and just as every cough, every colic, fever, diarrhœa, cramp, or fit in an infant is put down to teething, so eczema is ascribed to the same cause."

CHAPTER IV.

THE DIFFERENTIAL DIAGNOSIS OF ECZEMA.

Eczema may be confounded with *Erythema, Erysipelas, Herpes, Scabies, Psoriasis, Pityriasis, Pityriasis rubra, Lichen ruber, Sudamina,* and *Lupus erythematosus.*

To avoid repetition, I will refer the reader to the characteristics of an eczematous inflammation, as given at pp. 18 and 19.

I will then take each malady as mentioned above, and, with moderate care, I believe very few blunders will be made. But I repeat that we must take a wide view of eczema: we must never expect to see exactly the same physical aspect in any two cases, so much is this special inflammation of skin modified by peculiarities of skin, by external irritants, and by treatment.

Erythema is denoted by—

A. Simple redness of skin.

B. Very little itching.
C. No appreciable infiltration of skin.
D. Absence of exudation.
E. A white stain remaining on the cutaneous surface after pressure is applied.
F. Desquamation accompanying it.

Anderson has pointed out that during the process of recovery we find, mingled with the eczema, patches of simple erythema; and we must also remember that an eczema commences as a congestion or erythema of the skin.

Erysipelas.—

A. Almost exclusively confined to the head, face, and lower extremities.
B. The swelling is very great.
C. There is an abrupt edge.
D. It spreads by continuity.
E. The vesicles are much larger than those of eczema.
F. There is but little itching.
G. The temperature is always above normal.
H. The lymphatics are always involved.

There are some cases of cellulitis of the face which embarrass us very much as to

diagnosis—cases which attack the bridge of the nose and over the malar bones, which relapse many times over in the lifetime of the individual, cases which have not an abrupt edge, are not associated with a high temperature, and occur without any breach of skin. In this group we can only be guided by the history of the case and by the size of the vesicles, which are much larger than we see in eczema of the face. But in such cases we are wise if we reserve our judgment, erysipelas lasting much longer than this form of vesicular erythema.

Herpes.—Cases of herpes zoster cannot be mistaken for eczema if we remember how this malady follows the course of the nerves, if we remember how it is limited to one side of the body, and how it is preceded by acute pain, and only occurs once during a lifetime.

In herpes of the lips and prepuce we shall find—

A. The vesicles are in clusters.

B. They run their course in a few days.

C. They are not replaced by fresh crops.

D. They are not accompanied by infiltration of skin.

E. There is very little itching.

F. The lymphatics are always involved.

Scabies.—

A. There is always a history of contagion.

B. The eruption appears on the flexors of the joints, and very often on the nipples, the umbilicus, and the penis.

C. The eruption does not appear on the face or scalp.

D. The evidence of scratching is most obvious on the lower part of the abdomen, the inner sides of the thighs, and the folds of the buttocks.

E. The presence of the burrows of the itch-mite.

F. The vesicles which appear are isolated.

G. The scraped under-garments will commonly contain fragments of the acari.

H. The acari can be found by microscopical examination.

I. The itching is seldom troublesome during the daytime.

In a case of recent scabies the above rules will usually surely guide us, but when the malady has existed for a time, and the scratch-

ing has induced an eczematous state of the skin, our difficulties are much increased.

Sometimes we let our diagnosis rest upon the result of our treatment, and here again we may easily fall into error. If a case of scabies complicated with eczema is treated by sulphur ointment, we must not expect the irritation to disappear after a few applications; in point of fact, the ointment not infrequently sets up a good deal of cutaneous irritability. Neither must we believe that every vesicular eruption which is cured by a sulphur application is due to the presence of the itch-mite.

Our diagnosis of scabies will often be decided by the question of contagion. Scabies, according to my experience, is always conveyed by the victim to any one sleeping with him or her, and we commonly find the disease attacking all the members of a family. There is still some doubt as to whether itch is ever conveyed by means of clothing or bedding. Certainly it is true that patients who have had this malady do not usually have relapses, although they may wear the same clothing which they did when

the disease was present—clothing which has not been disinfected.

Psoriasis—

A. Is uncommon in early life and old age.

B. The disease disappears spontaneously.

C. The eruption is always in circles, or segments of circles.

D. The scales scratch up, giving the appearance of spermaceti; and if we continue scratching, we find a semi-transparent membrane, beneath which the bleeding points of the papillæ become visible.

E. Seldom met with on the hands.

F. The itching is very slight.

G. The spots have an abrupt edge.

H. The spots are more abundant on the extensor than on the flexor surfaces.

If a ring of psoriasis has existed for a long time in such positions as the elbows or knees, where there is much movement, the eruption will become much intensified, and the surface will be crossed by clefts reaching down to the true skin. These clefts will bleed, and the scales, becoming mingled with

blood, will be black or brown, according to the quantity of blood present. In such instances we shall hear our patients complain a good deal of the itching, or rather soreness.

If the psoriasis occurs on the scalp, the eruption is irritated by the comb and brush, and we find the same colouring of the scales, and as we pass to the frontal bones, a psoriasis eruption often—always, I should say—loses its distinctive characteristics, and becomes eczematous; at least, this is true as the spots merge from the hairy portion of the skull to the frontal bone.

We also very often find fissures behind the ears in cases of psoriasis, which in no way differ from the clefts found in eczema.

Pityriasis—

A. Itches very little.

B. Is not attended by effusion into the skin.

C. Has only epithelial proliferation.

D. Is often the sequel of treatment, or is found in the subjects of wasting diseases.

It is of importance to remember that many cases of eczema of the scalp have been

preceded by long-standing pityriasis, and in some instances the line of demarcation between the two diseases is obscure. But if we remember the characteristics of eczema we are able to draw the line with all practical sufficiency. One point will assist us considerably: it is, that eczema of the scalp is usually at some time of its existence pustular, and that this pustular condition irritates the lymphatic glands sufficiently for us to detect them. In infantile eczema these glands very often suppurate. Another point is, that if we scratch up the secretion of an eczema of the scalp we shall find that serum oozes from beneath the surface.

Pityriasis Rubra.—Writers on dermatology have all isolated a group of cases (Devergie was the first) which present the following phenomena:—

The eruption consists of a livid rash, with an abrupt edge and profuse desquamation; the rash has a tendency to attack the whole cutaneous area, including the nails and hair; the disease sometimes destroys life, and usually occurs in middle or advanced age. Anderson states that the itching, if present, is

usually moderate. There is a good deal of effusion into the skin.

I shall best convey my own ideas of the nature of the disease by the recital of a case.

C. Fuller, aged fifty-four, a seaman, came to St. John's Hospital on May 25, 1887. Says that "he has had an eruption in limbs and body for three or four years; itches very much, and has never disappeared."

"*Inspection:* On looking at his body, one is struck by the amount of pigmentation: he is the colour of liver. He is, so far as his limbs and trunk are concerned, almost hairless. He looks thin and ill, and, as he stands stripped before me, he 'shakes with cold,' as he expresses it. The inguinal glands are as big as good-sized potatoes. On pinching up his skin, I can feel much thickening, especially about his scrotum. He has plates of epithelium on his back and shoulders, and looks as if he had been snowed upon; and if his skin is scratched, there is quite a shower of scales. His scalp and face are not affected. He has a fern-leaved tongue, and has lost all his teeth. He shows evidence of scratching

upon his skin. The nails are thickened, and are lustreless. He has fissures about the tips of his elbows and points of his knees. He has a distinct secretion upon his testicles, which secretion consists of pus and serum. The edge of the eruption is fairly well defined. The thickening about the folds of his buttocks is very marked, and feels like the dewlaps of a cow. He states that his wife has to sweep the carpet after he has been dressing, to remove the *débris*, and that his bed contains handfuls of scales.

"I am not able from any physical signs to differentiate his condition from one of acute general eczema."

If any unprejudiced observer will make a careful study of such a case, I cannot but express the belief that he will come to the same conclusion as I have done; that is to say, that such instances are only exaggerated forms of eczema.

In all those cases which I have been fortunate enough to see, I have found the same intolerable itching, the susceptibility to cold (they will shiver in your presence), and on some portions of their skin I have found

conditions which can only be recognized as eczematous. To classify these in a separate group as pityriasis rubra is misleading, and introduces into the study of diseases of the skin difficulties which ought not to exist.

Niemeyer has the following passage (which I quote with some satisfaction) in his chapter on Eczema. He says: "When the transudation is not so copious as to elevate or to break through the epidermis, it usually soon dries up; and then, instead of vesicles or pustules, nothing is to be seen except dry scales rising from the reddened skin. This has been called *Pityriasis rubra,* and is now known as *Eczema squamosum.*"

Seborrhœa.—

A. Seldom found except on the scalp.

B. The secretion is on the surface of the skin, and can be rolled up like putty.

C. There is very little itching.

D. The skin beneath the secretion is of a peculiar dead-white colour.

This condition is due to an excessive secretion of sebaceous matter, and constitutes the *Vernix caseosa* of newly born infants.

I have already alluded to those cases where this secretion occurs as a paste-like mass on the summit of the crown in infants—the condition which midwives call "cradle-cap."

The condition known as *Seborrhœa oleosa* is often met with in those whose occupation brings them into contact with irritating substances, such as coal-dust or smoke. In such instances we can often see the face looks greasy. In the Negro, the development of excessive sebaceous secretion is a race peculiarity, and has probably the effect of protecting the skin, by a layer of fatty matter, from the heat of the sun. The heat of the fire in cooks always gives them a greasy look.

Lichen Ruber.—

A. Uncommon before middle age.

B. Relapses, but not so frequently as eczema.

C. Never vesicular or pustular, and only slightly scaly.

D. Always presents flat-topped, angular, brick-red papules.

E. The papules group themselves together, and form islands of eruption.

F. Very common at cleft of nates.

G. Always symmetrical.

H. Itching less than occurs in eczema.

I. White spots and white lines found in almost every case in the pouches of the cheeks, and in some instances slightly raised smooth patches on the tongue (**Leucoma**).

The isolation of this interesting disease we owe to Sir Erasmus Wilson, who called it *Lichen planus.* Some claim priority for Hebra, who christened the state *Lichen ruber.*

When lichen ruber has existed for some time, there is considerable thickening of the skin, and, when this has been irritated by the rubbing of two surfaces together and by the scratchings of the patient, the condition is clinically very like an eczema, and it is only by remembering that the patches of rash are made up by the congregating of the papules, and the existence of these papules about these patches, that we are able to make a positive diagnosis.

The morbid appearances on the mucous membrane of the mouth and tongue are

often of essential importance in determining the diagnosis.

Another point in the recognition of lichen ruber from eczema is that we are almost always able to discover an exciting cause for the latter disease, whereas in lichen ruber there is no discoverable irritant. The disease attacks both sexes in pretty equal proportions and in varied conditions of health, and bursts out on both sides of the body at the same time.

Sudamina.—

A. Is always vesicular.

B. The vesicles are always discrete.

C. Their contents never become pustular.

D. The vesicles very seldom rupture, the fluid being re-absorbed.

E. The vesicles are bell-shaped.

F. The vesicles have a preference for the neck, chest, and abdomen.

G. The contents of the vesicles are acid.

H. The vesicles are caused by the distension of a sweat gland with an occluded orifice.

I. The condition is always accompanied by excessive sweating.

It has been asserted that the vesicles of sudamina are not surrounded by an inflamed areola; but this is not true.

We must always bear in mind that excessive sweating in such positions as the perinæum, the mounds of fat which rub each other in obese persons, and between the toes, will commonly produce sufficient irritation of the skin to set up an eczema. This, as Hebra points out, is frequently met with in those who have been made to sweat by the water cure.

The disease (which is known by Mr. Hutchinson as **Cheiro-pompholix**, which Tilbury Fox described as **Dysidrosis**, and Robinson of Philadelphia as **Pompholix**) is an eruption found on the hands and feet. This eruption consists, in the first instance, of vesicles of various sizes, which look like sago grains under the skin. These vesicles are sometimes absorbed, whilst others become yellow, and, when two or more run together, form bullæ, which eventually rupture, and leave the cutis red, tender, and

exposed. This condition, associated as it is with excessive itching, is often confounded with an eczema; but if we remember that here the vesicles are filled with sweat and not with serum, that there is no effusion into the meshes of the skin or exudation on the surface, and also that the disease runs its course in about two weeks, we shall not fall into error.

Lupus Erythematosus.—There are many reasons for regarding this condition as an eczema. I am at the present time attending the wife of a medical man with this disease, and she has a most typical eczema of each ear, with the characteristic eruption in the face. Again, when erythematous lupus attacks the scalp, it is always associated with a copious oozing of serum on the surface, giving rise to a secretion looking like gum-arabic. Still, in the present state of our knowledge of the disease, it is best to give the distinguishing traits of the affection :—

A. Seldom met with except in the upper extremity.

B. Itches very little.

C. Has an abrupt edge.

D. Is covered with adherent scales.
E. Always leaves scars.
F. Is always symmetrical.
G. When it attacks the scalp, permanent bald patches result.
H. Not met with during childhood.

Ringworm.—

A. Always occurs in circles.
B. Itches very little.
C. Has an abrupt edge.
D. Never symmetrical.
E. When it occurs in the scalp, is associated with nibbled and trampled hairs.
F. Has a tendency to heal in the centre.
G. Most common in early life.
H. Usually a history of contagion.

We must always bear in mind that all the diseases which are due to the invasion of the skin by a mould fungus may become eczematous in those who have the eczematous diathesis. This is especially so in cases of ringworm of the hairy portions of the face. Very few cases of sycosis run their course without becoming eczematous at some period of their career.

Too vigorous treatment of ringworm will very often set up an eczema.

The disease known as **eczema marginatum,** occurring between the scrotum and the thigh, is always eczematous. This condition, as is now proved, is due to a trichophyton invading the skin in this situation.

Syphilis of the Palms and Soles.—Three conditions which occur in the palms, and soles which often present us with a difficult diagnostic problem, are *syphilis*, *eczema*, and *psoriasis*. I put out of consideration pemphigus, scabies, and urticaria; these three latter maladies have sufficient characteristics to enable us to give with precision our opinion as to their nature. With the three first our difficulties from physical signs alone are in some instances insurmountable; at least this is true of syphilis and eczema.

Psoriasis of the palms and soles is a very rare condition, and, when met with, is always associated with the disease elsewhere. It consists of discrete islands of exfoliating epidermis. It itches very little, and is essentially a proliferation of

epidermic cells without any effusion into the tissues.

In the early stages of syphilis, the flat, bronze-coloured papules which occur on the palms and soles are associated with a syphilide elsewhere, and are unmistakable. It is only during the later stage of the disease that we meet with difficulty. After a good deal of thought and observation, I should say an eruption seen upon the palm, consisting of patches with a distinct edge, with a frill-like state of the epidermis, not itching very much, and not having deep clefts upon its area, is syphilis. I should say any eruption which occurs on the palms or soles having an indistinct edge, and is accompanied by deep and painful fissures and great itching, is an eczema. But I am free to confess that on many occasions I have relied upon these points, and, basing my diagnosis upon them alone, have lamentably failed; and it has only been by looking for the evidence of the course of syphilis, and by asking for the past history, that I have been put into the right path.

The explanation lies probably in the follow-

ing facts :—A syphilitic gumma occurs in the palm of the hand or sole of the foot in a patient who has the eczematous diathesis, and it is the mingling of the two states which baffles our diagnosis. This is why I take exception to the broad statement that syphilitic eruptions are never eczematous.

I cannot conclude this chapter without stating my belief that we shall find, in all our patients who come before us for diseases of the skin, that by far the greater number will during some time in their life develop an eczema. The simple fact of the occurrence of a skin disease, be it a psoriasis, a lichen, or an acne, denotes a want of integrity in the cutaneous area. We might even advance the line of thought still further, and say that very few individuals pass through life without suffering from one of the degrees of eczema. If we let our thoughts travel to the mucous membranes, do we not find that a catarrhal state (the analogue of an eczema of the skin) arises at some period of life? Here we find the same degrees of susceptibility or proclivity towards such states. It is just so with the

skin, and we must always have present in our minds the great and important fact that tissues once damaged by a morbid state never attain their absolute resisting power again, and will be the more easily excited to the original morbid state by the application of the exciting cause.

CHAPTER V.

MODIFICATIONS OF ECZEMA.

THIS chapter will be devoted to an attempt to portray the modifications which eczema undergoes—modifications which are secondary to the structure attacked and the irritant applied. The interesting chapter which Hebra wrote in his essay on Eczema (vol. ii. p. 89) puts the matter in such a plain and practical manner that I shall quote his words.

He says: "Which variety of eczema will follow the application of an irritant depends upon its quantity and strength. The length of application is another cause of difference in the effects. Transitory irritants are more easily borne, and cause slighter injury, than those which last longer, and especially those which are uninterrupted. Moreover, we must take into account *the specific vulnerability* of the patient, which may vary greatly. For

while in some cases the skin is as sensitive as a daguerreotype plate, and breaks into an eczematous eruption under the slight stimulus of light, in others it will bear severe irritation before showing the least reaction. The state of health of the patient at the time must also be remembered."

He goes on to say: "Thus the integuments of the genitals, the face, and the flexor surfaces of the joints show less power of resistance, and are more easily attacked by eczematous eruptions, than those of the extensor surfaces of the limbs and of the back; while we find most indisposition to reaction in the skin of the palms and soles, which is destitute of sebaceous follicles."

These words are pregnant with thought, and show how far-reaching Hebra's knowledge was on the subject of diseases of the skin.

There are some broad general rules respecting eczema which we do well to keep in our thoughts. Thus, it may be said that eczema occurring in those positions where the hairs attain their full physiological development—viz., the scalp, whisker and moustache regions, the axillæ, and the pubis, and also on the

chest and limbs of those who produce a vigorous growth of hair in those positions—is almost invariably *pustular*; whilst in those situations where the skin is smooth and hair development very slight, the eczema will be either *erythematous* or *vesicular*, and when old, *squamous*—I allude to such situations as the face, ears, trunk, palms, soles, and flexors of the joints; and in those positions where the hairs are not long—such as the outsides of the limbs—the tendency of an eczema is to assume the *papular* variety.

We can often verify this by a careful examination of those who are the subjects of a general eczema, and it must be obvious that, however varied the manifestations are, it is the best to believe that they are all due to the same morbid action. The older writers used to call the eczema of the scalp *Porrigo* or *Tinea mucosa*, whilst the same process occurring on the face was designated *Impetigo faciei-rubra*. The scaliness on the trunk would by some be known as *Pityriasis rubra*; and the papular form on the legs would be said to be *Lichen*, and only the vesicular stage would be known as *Eczema*.

A very moderate amount of observation of the natural history of eczema will furnish abundant proof that all these varieties are connected by an indivisible chain. In some instances the eruption commences as a vesicle; in others the initial lesion may be an erythema, a pustule, or a fluid papule.

After endeavouring to prove that all these states are one disease, it remains for me to take a natural distribution of eczema, and endeavour to portray the history, the physical aspects, and progress of each variety.

The division of so many diseases into *acute* and *chronic* has at least the sanction of antiquity, and although I recognize the fact that such divisions are arbitrary, still, in a study of eczema, I cannot resist availing myself of this distribution; and we will first take

Acute Eczema.—I will recite the history of a case. J. Hiskins, No. 1700 in note-book of St. John's Hospital. Presented himself July 6. Says "he had a rash on his face and hands a month since; he took some medicine, and it went away. He spent the day on July the 3rd on Clapham Common in

a very hot sunny day, and this is the result. Complains very much of stiffness and soreness.

"*Inspection.*—His teeth are crumbling. He has flat and spotted nails, and is deaf on one side (left). He has on the back of his neck and face a rash, which consists of varied-sized vesicles, some of which have burst and are oozing a secretion which looks like honey. He has also on the backs of his hands and the dorsal aspects of his fingers a distinctly eczematous eruption. The lymphatics are not involved. Temperature, 98.5°."

This man was under treatment for three weeks, at the end of which time he was discharged cured. He was told to remain indoors, and was ordered a brisk purge, and to smear over the eruption a cream made with olive oil, solution of lead, and oxide of zinc.

I could multiply this example by many more from my note-book. Suffice it to say, that acute eczema is most commonly met with on the hands, feet, genitals, and face.

It will reasonably be asked: "When do you say that acute eczema leaves off and chronic eczema begins?" The answer can

only be: "When eczema runs a short and fairly regular course, when we find the disease bursts out suddenly, we speak of the attack as one of acute eczema; still, the great fact remains, that all cases of eczema begin as an acute variety of the disease, and that they gradually glide into the persistent or chronic form of the malady."

There is one variety of acute eczema to which I must call attention, because of its serious nature and its tendency in some cases to prove fatal. I allude to

Acute General Eczema.—I will recite the history of another case. W. P., aged forty-six, a labourer, presented himself at St. John's Hospital on May 13, 1886. He said: "I had been working very hard, and often remained wet through for several hours. Three weeks ago I suddenly felt out of sorts. My limbs ached, I had a pain in my head, I shivered, and vomited. I was seen by a doctor, who told me I had scarlet fever. I was in bed for more than a week, when my skin began to itch, and it has itched ever since. I have lost a good deal of flesh, and I am as weak as a rat. I keep turning cold all over."

"*Inspection.*—When he is stripped he complains of the cold; his pulse and temperature are normal. The whole of his body, from the crown of his head to the soles of his feet, is monopolized by an inflammation of the skin. On the scalp the skin is covered by a quantity of scales mingled with vesicles and pustules; these mat his hair together, and give rise to a smell not unlike strong cheese. His face is red and swelled, and both his eyelids are as puffy as we see in kidney dropsy. His ears are much swollen, and are spattered with vesicles, some of which have burst. He has distinct vesicles on the groin, behind his knees, the axillæ, and flexors of elbows; but on his palms are the most pronounced vesicles. The remainder of his body is red and desquamating, and is not to be distinguished from the peeling stage of scarlet fever. His urine contains a trace of albumen. His appetite is very bad. The itching is so severe that he cannot sleep."

I watched this case for four weeks, during which time fresh vesicles kept appearing, and the itching was unsubdued. I heard after-

wards that he was admitted into a workhouse infirmary, where he had an attack of acute pneumonia and died.

I have had an opportunity of seeing seven such cases, and of these, five recovered after a long and suffering illness. They were all very like the one I have related, and in each instance the disease came on suddenly. I may add that two of my cases were relapses.

It is impossible to do more than speculate as to the cause of such outbursts of eczema; but I have been led to believe that some have been due to the irritation of uric acid in the system, whilst in others I believe the eczema has been set up by an attack of one of the exanthems, either scarlet fever or measles.

We now pass on to a study of chronic eczema; and for the purposes of order in my description I shall divide the subject into the following groups:—

1. Eczema of the hairy portions of the body.
2. Eczema of the smooth portions of the body.

3. Eczema of the orifices of the body.
4. Eczema of the flexors of the body.
5. Eczema due to vegetable parasites.
6. Eczema due to animal parasites.
7. Eczema of fingers and toes.
8. Eczema of the nails.
9. Eczema of the penis and scrotum.
10. Eczema of the legs.

Eczema of the Hairy Portions of the Body.—*Chronic Eczema of the Scalp.*—The thick growth of hair, and the richness in sebaceous follicles, will account for the peculiarities of an eczema occurring in this position. If we meet with chronic eczema in those who are bald, the disease will be like the same malady occurring on a smooth surface, such as the face; whereas in those who have a good crop of hair the disease presents a different picture.

The secretion of an eczema of the scalp mixes itself with the sebaceous matter and pus-cells, and glues the hair together into tufts. But when the hair is long and the secretion is permitted to remain, we find the disgusting odour which is due to liberation of the fatty acids of the sebaceous matter; if,

added to this, the patient is lousy, this state encourages the development of the pediculi, and they flourish in a surprisingly rapid manner. I have seen in London several instances where the whole of the scalp has been covered by a mass looking like honeycomb, stinking abominably, and being a moving mass of lice; and I can corroborate Hebra's statement, that he has noticed even the larvæ of flies upon such scalps, and on cutting through the mass numbers of white maggots crawled hither and thither.

This condition is known in Poland and Russia as *Plica polonica*.

In old people whose hair is thin we meet with a condition which is known as *squamous eczema*. The semi-transparent and flexible plate of secretion can be raised from the scalp in such cases, when the hairs will be found to pierce the plate thus detached.

In young children, eczema of the scalp is always pustular, and, as I have before said, the cervical glands become considerably swollen in such cases, and sometimes suppurate.

There is a variety of eczema which occurs in the scalp in the following positions only:

the summit of the crown, in front of the ears, and where the forehead joins the scalp. This variety is always persistent, is associated with suppuration of the hair follicles, destruction of the papillæ, and is followed by permanent baldness in the situations stated.

After an attack of universal eczema of the scalp the hairs will be left thinly planted, and will be lustreless and puny; but it is unusual for permanent baldness to result from such attacks.

Syphilis of the Scalp is often confounded with eczema; but if we remember that the destruction of tissue which occurs in the late stages of syphilis always has a tendency to be ear-shaped—if we remember that the condition is always local and asymmetrical, we shall not make the mistake.

I must again draw the attention of my readers to the common clinical association of pityriasis, ringworm, and seborrhœa, with eczema; and I must again allude to the fact that the application of strong remedies for the cure of other diseases of the scalp will often set up an eczema. This fact must be borne in mind when we are called upon to treat any

disease of the scalp, because our remedies will in some vulnerable skins produce a disease which is more troublesome than the one we are asked to cure.

Eczema of the Hairy Portions of the Face.—The eyebrows, eyelashes, chin, cheeks, and upper lip are frequently the sites of eczematous processes. In those who shave, the irritation of the razor will be sufficient to produce an eczema, which will not differ from the course of the malady in the smooth portions of the body. Anderson has suggested the compound word *Eczema pilare-faciei* to denote the malady when the hairy parts of the face are involved.

Eczema attacking the regions under consideration is invariably pustular. These pustules are the primary lesion, and will be found surrounding the hairs. The hairs, when the pustules are first formed, are extracted with pain, but when the suppurating process has existed for some time, they are loosened, and either fall out of their follicles, or can be painlessly extracted.

The crusts in this form of eczema, being composed almost entirely of pus, are yellow,

and when several pustules run together, as frequently occurs, these scales are of considerable size, and are with difficulty separated from the skin, and when separated, beneath them the skin is found to be ulcerated, and oozes a good deal with serum and blood. The disease has a tendency to continue until the ulcerative process has destroyed the hair follicles and inter-follicular structure, and has left a permanent scar, with absolute baldness. Eczema of the hairy portions of the face is almost always symmetrical.

The pustules come in successive crops.

The patients complain a good deal of burning pain in the part, much more than itching, and if you touch their hairs, they shrink away, saying, "The hairs are so tender."

If this form of eczema occurs on the upper lip, it is very commonly induced by nasal discharges; but when it attacks those who do not shave the chin and cheeks, we are often unable to discover an exciting cause.

We often experience great difficulty in discriminating between sycosis of the hairy parts of the face and eczema. In point of fact, it is

only the presence or absence of the *Trichophyton tonsurans* which affords us a positive diagnostic datum.

Eczema of the hairy parts of the face frequently relapses. On the upper lip this is especially the case; so much so, that I have only been able in some cases to prevent relapses by ordering my patient not to wear a moustache.

When eczema attacks the eyelids, the secretion from the pustules around the hairs will often glue the eyelids together in the morning, and in many cases the inflammatory process will travel on to the conjunctiva, and produce so much bulging of the mucous membrane that the lower eyelid is rolled out, and the eyelashes are laid on the cheek (*ectropion*). Sometimes the lachrymal apparatus is choked, and when this occurs the usual manifestations of an obstruction to the transit of tears follows.

Eczema of the Pubis.—The pubic hairs are commonly attacked by a pustular eczema, and in some cases I have seen permanent loss of hair result from ulcerative action. I am at the present time attending an old gentleman

who has lost almost all his pubic hairs by this process.

Eczema of the Vulva.—Discharges from the vagina will often excite an eczematous process in the hair follicles of the vulva and mons veneris, and owing to the quantity of cellular tissue which is found in the labia, there is associated with this inflammation a good deal of swelling and troublesome heat, pain, and itching of the parts.

Pustular Eczema of Other Parts of the Body which are Hairy.—In those individuals who have a vigorous crop of hair on their trunks or limbs we often meet with a pustular eczema of the hair follicles. This condition is frequently associated with other varieties of eczema, and it is a common experience to meet with a persistent and troublesome condition which will attack the hairs of the legs, arms, and chest—a condition in which the hairs can be demonstrated as springing from an island of pus.

Eczema of the Axillæ.—When eczema occurs in these situations, the hair follicles will always be involved, and owing to the depth of the hair sacs in this position we

meet with painful abscesses surrounding the hairs.

Eczema of the Smooth Parts of the Body.—It is unusual to meet with an eczema which is limited to the smooth parts of the trunk, excepting on the face, neck, and ears. The exposure to the influence of sun, wind, dust, and soap, will commonly set up an eczematous process in these positions. It is not common to find the malady in these parts unilateral. Exceptions do occur to this, but they are not frequent.

The Ears.—The skin of the ears clings closely to the cartilage of the ear; moreover, it forms folds as it passes from the ear to the face in front, and from the mastoid region to the ear behind: these local peculiarities lend a distinctive character to eczema occurring on the ear. Eczema may attack any part of the auricle, and is often represented by a deep fissure behind the ear. Usually, however, the whole of the auricle is involved, and in this position we meet with a most copious crop of vesicles, which when they burst give rise to a large quantity of secretion, which will in some instances hang from the lobe of the

ear like an icicle (*Dartre stalactiforme*). There is always considerable inflammation of the auricle in cases of eczema, and this swelling alters the conformation of the ear, making it look clumsy. The eczematous process creeps into the external auditory canal, and the secretion from the vesicles, mixing itself with the ceruminous secretion, blocks up, either completely or partially, the canal, and produces either a certain degree of, or absolute, deafness.

Eczema of the auditory canal is often induced and perpetuated by the habit of introducing hair-pins or common pins either to allay irritation or to extract wax. To encourage people in this foolish and often injurious practice the chemist sells a little bone scoop, which we so often see on toilet-tables. Hebra has pointed out how in some cases the eczema of the auditory canal is a sequel of the eczema of the auricle, or rather a continuous process. The deafness produced has often been said to be due to our curing the eczema of the ear too rapidly.

Eczema of the Smooth Parts of the Face is usually in its initial stage erythematous, and

in some instances the malady never passes beyond this stage. The form which occurs at the spring-time of the year, and which consists of indefinite patches of eczema, seldom becomes vesicular; whereas the acute variety, which is the result of exposure to fierce sunlight, is usually vesicular, and passes through a very rapid course, occurring many times over in the lifetime of the individual; in point of fact, the skin in some cases never completely recovers, but always remains shining, or rough, and inelastic. This is especially the case in those who are exposed to the constant action of heat, or the influence of rough weather.

Eczema of the Forehead is sometimes met with alone, and is usually the result of wearing hats or caps which irritate the part. In cases of infantile eczema we meet with clear yellow crusts on the forehead and cheeks, which crusts are sometimes black or brown, from their admixture with blood. Young children with eczema will sometimes scratch their cheeks until the blood runs down in streams. The different colour of these crusts is the reason that we have two varieties of

facial eruptions described by Alibert: one, where the crusts are like honey, he has designated *Melitagra flavescens;* whilst the variety where the crusts are darkened by blood is called by him *Melitagra nigricans.* It is such a tendency to fix upon a physical peculiarity of skin eruptions as a justification for the introduction of new names which has so obscured the subject of cutaneous diseases.

Eczema of the Smooth Portions of the Trunk and Limbs.—If we examine our patients carefully, we are a good deal astonished to find how many of those who come before us with an eczema are, so far as the limbs and trunk are concerned, almost hairless. Such skins are prized by the laity, and are called "fine skins." They feel smooth to the touch, but unfortunately they are skins which are easily irritated by external agents. Now, when an eczematous process is started in those who develop but little hair, it will be modified by this condition, and instead of the eczema being a papular or a pustular variety, it will be found to be, when acute, either erythematous or vesicular, and it is in such

skins that we find the large leafy plates of epidermis, which are said to be pathognomonic of *Pityriasis rubra.* From my own observation, I should conclude that every case of this malady has occurred in those who had very little hair upon their limbs or trunk.

I do not wish it to be understood that I believe eczema occurring in those who have fine skins never becomes pustular. On the contrary, the vesicles do in almost all cases become pustules, and when the disease is active, the crusts and scabs are often quite yellow. It is only when the disease has existed for some time that we find the large scales form, like gold-beater's skin.

Eczema of the Orifices of the Body.—In considering eczema when it attacks the orifices, we must always keep in our thoughts two facts—first, the movements of the parts; secondly, the secretion which passes over them.

Eczema of the Orbits is often accompanied and preceded by an inflammation of the conjunctiva. It sometimes occurs as an isolated variety, but is more commonly associated with other forms of eczema. Occlusion of the lachrymal canal will, by forcing the tears over

the cheek, in many instances set up an eczema. Sometimes, at the outer canthus of the eye, an eczematous fissure is found.

The quantity of loose cellular tissue of the eyelids prevents the formation of definite vesicles, but, instead, the lids become much swollen and assume a curious granular appearance. If the malady has existed for a long time, the epithelium becomes exuberant, and thin grey crusts form on the lids, and in some instances a deep long fissure will form on the upper eyelid.

Eczema of the Orifices of the Nose.—There are in the adult a few hairs growing in the orifices of the nostrils, and these modify the course of eczema in this position. Eczema usually gives rise to a good deal of secretion, which I have seen choke up the nostril. The disease is frequently the sequel of a catarrh, and is often associated with eczema of the upper lip. In young children the subjects of *contagious porrigo* it is a common experience to meet with an eczematous condition of the nostrils.

Eczema Rimosum of the Nostrils.—We meet with a deep, painful fissure at the bottom of the cleft where the ala of the nose joins

the septum, most frequently at its upper aspect. This forms a scab, which the patient will constantly pick off. The eczema in such cases is often, but not always, unilateral.

Eczema of the Lips is met with alone. It is easily recognized in the adult, and, owing to the frequent and free mobility of the part, gives both the patient and the doctor considerable trouble. The process in its acute stage will cause a good deal of swelling and pain, but, as it passes into a chronic form, clefts radiate from the mouth like the spokes of a wheel—clefts which vary a good deal as regards their length and depth. Between these clefts the epidermis is laid in fine crusts, like flakes of puff-crust.

Considerable difficulty occurs in separating eczema of the lips from the syphilitic affection of these parts met with in the inherited form of the disease. It has been said that considerable assistance as to diagnosis is obtained by remembering that syphilitic eruptions rarely affect the whole of even one lip, and has a tendency to concentrate itself at the angles of the mouth. This is undoubtedly true, but we must also remember that many

cases of inherited syphilitic affections of the mouth (*stomatitis*) do produce an eczema of the lips, and it is when the two conditions meet that our difficulty comes in. The question of treatment will assist us in the diagnosis, and we should bear in mind the fact that in cases of inherited syphilis we never meet with the affection of the lips without evidence of the disease elsewhere. And I should say the deep, long cicatrices which radiate from the mouth after the cure of inherited syphilis of the mouth are not met with as a sequel of eczema.

Eczema Rimosum of the Lips.—Cracked or chapped lips, as the laity call them, correspond in every way to the form of eczema which is known as fissured or rimose eczema. These cracks are situated, as a rule, in the centre of either the top or bottom lip, and they almost always leave permanent scars, which break down time after time. They are common in those who spend much time out of doors in the rough sharp weather of winter.

Eczema of the Nipples may occur in either sex. In the male, it is usually induced by the *acarus scabiei*, or the irritation of rough woollen underclothing. In the female, in

addition to these two causes, we have the irritation of suckling ; the eczematous process spreads around the nipple, and often the irritation passes into a mammary duct, and sets up abscess of the breast. This is why so many lying-in women have sore nipples before they have mammary abscess.

Eczema Rimosum of the Nipples.—It is common to find a deep cleft, sometimes several of them, in the nipples of suckling women. These clefts may cross the nipple at its apex, or, what is more frequent, they occur at the base of it, and the mother experiences much acute pain each time the child sucks. As Sir James Paget has pointed out, chronic eczema of the nipples in the aged often results in cancer.

Eczema of the Umbilicus is met with as a solitary state. When the condition is acute, the navel is puffy. The eczema in this situation ranges itself around the whole of the umbilicus to about the size of a half-crown. Sometimes clefts occur in the eczematous area, especially in persons who are very fat.

Although umbilical eczema is met with alone, it is most frequently associated with the disease in other situations.

Eczema of the Anus.—It will clear the ground if I state emphatically that I have never examined any case of itching about the anus without discerning evidence of inflammatory action, and that in every case this action has produced manifestations which could only be classified as eczema. I quote with much pleasure the following passage from the very complete work of Cripps on "Diseases of the Rectum and Anus." I only regret that he has retained the term "pruritus ani."

"If the part be examined occasionally, little or no morbid appearance is presented, but more commonly the skin about the anal region is red and hard, and is thrown into several deep folds, which appear to be drawn almost into the external sphincter. On separating these folds, the skin will sometimes be found in an eczematous, moist, and excoriated condition."

This so well describes the condition that it will not be necessary to add more than that when eczema of the anus has existed for some time, and has been much scratched, we shall find either that the parts are smooth, glossy, and thickened (cicatrices), or else the papillæ have become hypertrophied, and flat

tables of heaped-up tissue are met with analogous to those found in old eczema of the legs about the foot and ankle, and which Sir Erasmus Wilson called *Eczema hypertrophicum.* Such a condition of the skin exactly recalls that of the feet of Chloe, the negro slave in Virgil's "Salad": "Continuis rimis calcanea scissa rigebant."

The eczematous condition very often spreads along the perinæum to the scrotum, and backwards to the cleft of the nates.

Eczema of the anus is often associated with the disease in other situations.

Eczema Rimosum of the Anus.—When fissures occur in the anal folds they not unusually creep into the mouth of the sphincter, and when this occurs we have a fissure of the anus produced.

I do not postulate that every case of anal fissure is preceded or accompanied by an eczema. Many cases occur, in the course of ulcerations in the rectum, which spread downwards.

The symptoms which accompany eczema of the anus vary, itching being the most annoying. It is most severe when the

patient is in bed, but it is not confined to that time. Standing near a fire, or sitting for any length of time, will aggravate it, as will the passage of fæces over the inflamed surface, or the secretion from piles. And it is interesting to notice how many patients who have eczema suffer from piles.

In those cases where the fissures of eczema spread into the sphincter, they gape when the anus is stretched by the passage of the fæcal mass, and, retaining some portion of the fæces on their raw surfaces, cause the burning, lasting pain which accompanies this condition. The day I wrote this page the pain was described to me by a patient as if a bayonet were thrust up the anus. The simile is a strong one, but it points to the degree of suffering.

Eczema of the Orifice of the Vagina.—I must again say that every case of irritation of the vulva which I have had an opportunity of examining has presented evidence of eczema, sometimes locally, sometimes associated with the disease elsewhere. Where the eczematous process is limited to the inner surfaces of the labia, the mucous membrane—which is here gliding into its analogue, the skin—is only

thickened and glossy, but when we find, as is usually the case, the eczema has spread to the cutaneous aspects of the labia, the characteristics of an eczema are present. We also find in some cases painful fissures running into the vaginal orifice, and rendering copulation a most painful act.

Eczema of the Flexors of the Body.—The free mobility of these parts, and the absence of hairs, together with the delicacy of the skin, must be borne in mind when we are observing this form of eczema. In some instances the degree of inflammation which occurs in such situations as the bends of the elbows and the popliteal spaces will be sufficient to embarrass the movements of the parts, and the limbs will be partially flexed. The cutaneous appearances vary a good deal in eczema of the flexors. In some cases the whole of the skin is thickened and has only a few scales on its surface, whilst in other cases there is a large congregation of scabs and crusts, and often deep and painful fissures.

It is unusual to find eczema of the flexors unilateral. When eczema attacks the bends of the knees, the popliteal spaces are some-

times affected; when the wrists, the ankles. The axillæ are in some instances eczematous with the root of the neck.

Parasitic Eczema.—In the chapter on the ætiology of eczema this was fully discussed. Suffice it to add, that we must always remember that both animal and vegetable parasites only set up an eczema in those who have the eczematous diathesis.

Eczema of Fingers and Toes is very prone to relapse. It is often found associated, and is almost always accompanied by the formation of rhagades, which renders the fingers stiff and clumsy-looking. Eczema of the fingers and toes is often a local condition. Little patches occur from the wearing of rings, for example. In other instances the malady spreads to or from the backs or palms of the hands.

Eczema of the Nails.—The body of the nail in many cases of eczema will be found with a number of depressions on its surface, or the latter will be affected by the conditions described on pp. 4 and 5. More frequently the root of the nail is attacked by the eczematous process, and where this occurs

the nail is often shed. This form of eczema is, as a rule, accompanied by eczema of the fingers or toes, and it rarely influences all the nails; or the eczematous process may be limited at the sides of the nail.

Eczema of the Penis and Scrotum may be either an acute or a chronic disease. When the disease is recent the penis is enormously swollen, and, as in the eyelid, the loose cellular tissue prevents the formation of vesicles, and on inspection we find the skin looks granular; whilst on the scrotum we meet with a copious crop of vesicles and pustules, which burst and decompose, giving rise to a most disgusting odour.

In cases of *chronic eczema of the penis* we meet with clefts running across the penis, and occurring at the bottom of the folds of skin. In some cases, where there is a short prepuce, there is present a large mass of chronic œdema on each side of the frænum, looking like a bag; whereas if the frænum is long, the eczema will travel on to the orifice, and here we find deep and irritating fissures, which make the exposure of the glans a painful process. Penile erections also become

painful. When the eczematous action passes into the under-surface of the prepuce on the glans penis, the state may be mistaken for herpes, balanitis, or syphilis; but if we remember that eczema of the glans penis occurs in islands which shade off into the healthy tissue, and which always itch a good deal, we shall not fall into error. There are always semi-transparent scales on the glans penis in cases of chronic eczema.

Chronic eczema of the scrotum is met with as an isolated condition. There is in some cases nothing more to be seen than a smooth state of the scrotum, with considerable effusion into the tissues. This can be pinched up, and will retain its form for some time. In other instances there are painful clefts, especially where the scrotum joins the thighs, and, as Hebra has pointed out, in others the most prominent parts of the rugæ are only eczematous. The irritation is most intense in this variety of eczema, and we often see the evidence of scratching in the way of torn-out hair, follicles, and papillæ. The itching is most troublesome after resting; sometimes it awakes patients.

I have already alluded to the condition which occurs between the scrotum and the thigh, known as *Eczema marginatum.*

Eczema of the Legs presents so many peculiarities that it seems well worthy of a special description. The chief point to bear in mind is its association with varicose veins. It is on account of this fact that we are obliged to attach so much importance to eczema occurring in the legs. If we omit traumatic, syphilitic, and scrofulous ulcers from our list, we shall find that all the other ulcers of the legs are preceded by an eczema. Not that eczema differs intrinsically when we find it occurring in the legs ; it is its obstinacy and its severity which claim our attention, and, I ought to add, the deep pigmentation which occurs in many cases. The following is an every-day experience with surgeons :—An individual has varicose veins ; the circulation of the blood is hindered by this condition, and the quantity of serum and blood-corpuscles which escapes is more than the healthy tissues require ; congestion ensues, inflammation follows, and, in the eczematous irritation, the formation of vesicles, pustules, papules, and

scabs takes place. The cause still remaining, the condition increases, and we find the epidermis is destroyed and the follicles of the skin are left uncovered (*Eczema rubrum*). The inflammatory process now passes into the true skin, the papillæ are destroyed, the cellular tissue perishes, and ulceration takes place, which may pass on to all degrees. In some instances the ulcers will be small and isolated; in others, they will be large and deep; and about the malleoli they will occur in deep and painful clefts, often running parallel to the long axis of the limb. Surrounding these ulcers the skin is often eczematous and deeply pigmented, whilst in other instances the epidermis is heaped up, and looks white and warty. In some cases a group of enlarged papillæ mass themselves around the malleoli or on the dorsum of the foot, and in those who are not cleanly in their habits these papillæ are brown and look like an enormous wart.

It is common to find enlargement of the lymphatics in eczema of the legs, and in some instances the whole of the skin-structures are enormously hypertrophied, and give rise

to an appearance which is pathologically an elephantiasis. We are often a good deal puzzled in cases of ulcers of the leg, not knowing whether they are of syphilitic origin; and in some instances, where syphilitic ulcers occur in those who have varicose veins and the eczematous diathesis, I believe from the physical signs alone an absolute diagnosis is impossible. The late Mr. Maunder used to say any ulcer without 4 inches of the knee-joint is specific. Unfortunately, syphilitic ulcers are met with in any part of the leg; certainly they are common immediately below and above the knee. If syphilitic ulcers are found on the legs without varicose veins, they are healing in one direction and spreading in another; and this characteristic, as is well known, is conclusive evidence as to their nature. Again, it is usual to find such ulcers occurring with the formation of recent gummata. The absence of itching, and the rapidity with which the gummata break down, are aids to diagnosis; as is also the history of the case, the remnants of syphilis, and especially the results of treatment.

CHAPTER VI.

THE TREATMENT OF ECZEMA.

It is interesting to notice how certain remedies associate themselves with certain diseases. Scabies and sulphur, syphilis and mercury, ague and quinine, psoriasis and arsenic, are connected in our minds, and, when such is the case, we may be quite sure that time has proved their efficacy, and use has sanctioned their application. They constitute, probably, our only specifics. Unfortunately, we cannot say a certain remedy springs before our minds when we think of eczema. Need we wonder at this if we reflect on the varied manifestations which this malady presents—how at one time we have to combat a surface in a state of acute inflammation, with the whole affected area either crowded with vesicles or pouring out serum, and sometimes blood, or else

the inflammatory action has passed into the pustular stage, and we meet with a surface which is oozing pus? In other instances the disease consists of papules which feel solid, and are only recognized as vesicles by a side light, or proved to be such by the prick of a lancet. Again, the inflammatory action may have existed for some time, and caused a copious crusting or scabbing of the surface, with a degree of effusion into the meshes of the skin varying with the position influenced, and being modified by the state of the tissues and the position of the inflammation. With such a varied pathological state, it is a mere empiricism which states that such and such a remedy, or combination of remedies, will cure an eczema.

We must admit that the curing of an eczema is not a mere idle phrase. It is literally true that, in almost every case of the disease, the skin can be restored to its normal state by appropriate treatment; but we are bound to put before all our patients the fact that the disease may, and probably will, relapse.

It will be my pleasure and duty to state

now the lines of treatment which I have found the most successful.

In **the acute stage** of eczema, when the inflammatory action is running high, and when the sufferings of the patient are greatest, the indications are to relieve the blood-pressure, to protect the surface from external irritants, and to get rid of the secretion. To fulfil the first indication, good will follow the administration of a purge combined with digitalis. I generally employ the following formula :—

℞ Magnes. sulph., ℥ss.
Sp. æther. nit., ♏xx.
Tr. digitalis, ♏v.
Syrup. zingib., ℥j.
Aquam ad ℥j.—Misce.
To be taken three times a day.

To protect the surface from external irritants we have the choice of several remedies. I use largely the following application, which is to be painted over the eczematous area several times a day with a camel's-hair dabbing-brush :—

℞ Zinci oxidi (Hubbuck's), ℥j.
Ol. rosæ essentialis, ♏ij.
Ol. amygd. dulcis ad ℥j.—Misce.
Sig. "The Application."

This forms an agreeable cream, and will always be grateful to the patient's skin. The drawback to its use is that it will run off, and in such situations as the face or scrotum I order the following ointment to be smeared over the surface :—

℞ Zinci oxidi, gr. lxxx.
Liquor plumbi, ♏xxv.
Glycerinæ, ♏lxxx.
Ol. amygd. essent., ♏iij.
Vaselini alb. ad ℥j.—Misce.
Sig. "The Ointment."

In other cases where the cream or ointment does not agree and give ease, I order the following powder to be dusted over the surface from a dredging-box :—

℞ Pulv. camphoræ, gr. xv.
Pulv. amyli,
Zinci oxidi (Hubbuck's), āā ℥iv.—Misce.
Sig. "The Dusting Powder."

To remove the secretions from the surface of the skin, I order, especially in the case of general eczema of children, a linseed bath, making the linseed-tea in the ordinary way, and using two large teaspoonfuls of the seed

to each gallon of water, with the addition of carbonate of soda or borax in the proportion of a teaspoonful to the gallon. This constitutes a bath, which should be made large enough to cover the body, and should be continued at a temperature of 100° for half an hour every day.

If I have a smaller tract of acute eczema to deal with, I order the crusts and scabs to be sponged off with a mixture made by adding the yolk of an egg and a pinch of carbonate of soda to a pint of water. My experience is that simple water is not sufficiently emollient to remove the secretions in cases of eczema, and, after trying quince emulsion, oatmeal water, and other things, I have come to rely upon those above mentioned.

Sir Erasmus Wilson wrote several articles on the treatment of eczema, and he advocated strongly the practice of giving the skin rest. In one instance I ordered the skin to be smeared over with Wilson's ointment, composed of oxide of zinc, spirit, and benzoated lard, and not to be disturbed for ten days. It was not disturbed for ten days, when the

child was brought to me in a terrible plight. The secretions had accumulated and decomposed, and were most offensive. The child had been restless and ill, and on scraping off the coating of ointment I found the larvæ of flies and masses of maggots in different places. The lesson was not lost on me. The principle is theoretically a right one, but its practice is not of universal application.

I should say that during the treatment of acute eczema it is always advisable to keep the patient indoors, and, if the trunk is involved, bed is the best place. The room must be kept down to a temperature of 60° if possible, and, what is of great importance, scratching absolutely forbidden; and in young children the nails must be cut short, so that they are unable to damage the skin with them. Messrs. Weiss, of Oxford Street, have made me an instrument which consists of a girdle and two leather bracelets; these are connected by straps, which can be lengthened or shortened by a buckle. Children will wear this, and it will at least prevent them scratching their upper extremity, and,

if we give the hands a short range of action, they can only reach a small part of the cutaneous area. Hebra says, "Let them scratch themselves; it does no harm." With this I cannot agree; common-sense will tell us that scratching an eczematous surface must increase the congestion of the part, even if blood is extracted by the abrasions produced.

If an acute attack of eczema becomes markedly pustular, and the secretion on the skin is yellow, we must use a remedy, for sponging or bathing the surface, which is a pus-destroyer. What I generally employ is a teaspoonful each of solution of lead, carbolic acid, and solution of tar, mixed with a pint of warm milk. Or a drachm of sulphate of potash dissolved in the same quantity of milk is equally efficacious. But care must be taken to wash off as much pus as is possible before any of the applications ordered are employed.

In small patches of pustular eczema, such as we see at the alæ of the nose, or on one finger, or associated with *contagious porrigo*, the following lotion is of signal service :—

℞ Zinci oxidi,
Sulph. præcipitati, āā ʒj.
Glycerinæ, ʒss.
Carmine, gr. ¼.
Ol. rosæ essent., ♏¼.
Spirit. vini rect., ♏xl.
Aquam ad ℥j.—Misce.
Sig. "The Application."

This lotion is dabbed on the skin, the powder being left on the surface. But we must watch carefully the effect of sulphur in eczema, as some skins are irritated very much by this drug.

In chronic eczema we have again to combat a local inflammation which has been modified by time. The malady has spread deeper into the tissues; the lymph spaces have become choked by inflammatory corpuscles; the surface of the skin has become covered by scabs or scales, or it is fissured by painful clefts. Our objects are—

1. To cause absorption of the inflammatory material.
2. To remove the secretions on the surface.
3. To protect the skin from external influences.

To bring about the first result, we have two distinct weapons—one, internal remedies; the other, external applications. In the present day, when our profession has ceased to believe as much in drugs as our fathers were in the habit of doing—although it is surprising to notice how the most sceptical write prescriptions, and, when ill themselves, drench their organisms—it is almost considered rank heresy to discuss treatment. Still, the fact remains that we are obliged to give our attention to internal treatment, and in many cases of chronic eczema undoubted good follows the administration of certain remedies.

Standing in the front rank of skin tonics is arsenic. I would ask those who deny the action of this drug to watch its influence in producing a glossy coat on horses, and I would ask them also to watch the almost startling way in which pemphigus will vanish under its influence.

We may safely act upon the following rules :—

Where an eczema occurs on both sides of the body, arsenic is of service.

In young children its usefulness is in-

creased by combining it with iron and cod-liver oil.

In giving arsenic to those who are of middle age I generally employ it in the form of pills, made according to the following formula :—

℞ Ferri arsenicalis, gr. $\frac{1}{6}$.
Pulv. zingiberis, gr. I.
Pulv. acaciæ, gr. I.
Extract. conii, gr. $\frac{1}{2}$.—Fiat pil.
Sig. "To be taken three times a day, after eating."

Corbyn & Co. have made for me a syrup which contains one grain of phosphate of iron, one grain of quinine, and a twentieth of a grain of arsenious acid in each drachm. This I give in symmetrical eczema. I also prefer this in the eczema occurring in old people.

The combination I give in infantile eczema is made as follows :—

℞ Syrup. ferri phosph. co., ʒj.
Liquor arsenicalis, ♏iij.
Pulv. tragacanth. co., gr. xx.
Ol. jecoris aselli, ʒj.
Glycerinæ, ♏xl.
Aquam ad ʒj.—Misce.
Dose, from one to two teaspoonfuls.

Sulphur, I think, is often of service,

especially in those who have a gouty tendency, and is taken very well in the form of a confection :—

℞ Sulphuris sublimat., ʒiv.
Potass. tart. acid., ʒij.
Ext. taraxaci, ʒiv.
Confectio sennæ, ʒiv.
Syrup. zingiberis, q.s.—Fiat confectio.
Take a small teaspoonful three times a day.

I do not wish it to be understood that every case of eczema will require the administration of drugs; but, after making a great many trials, I state my deliberate conviction that a cure is often produced more rapidly and more completely by a combination of external and internal treatment. I am quite sure this is the case in the eczema of young children. Absolute accuracy in the estimation of the value of the internal treatment of eczema is not possible, as no two cases of the disease are exactly parallel; and I admit also that many dermatologists deny their efficacy. Hebra was one.

To remove the secretion from the surface of the skin is a more difficult process in

chronic than in acute eczema; the scabs and scales are more abundant and more tenacious. To attain this result, the same remedies that I have advocated in acute eczema will be of service, but often inefficient, and we are obliged to resort either to the vapour-bath or to continuous packs with an alkaline solution. Carbonate of soda, borax, or sulphate of potash, in the proportion of a drachm of the salt to a quart of water, is the strength I employ.

Having removed all scabs and crusts, we want a remedy which will stimulate the part; or, as John Hunter, in his "Treatise on the Blood and Inflammation," expresses it, a remedy which will produce a change in the action of the disease. I am not quoting his exact words, but his object is obviously to convey the idea that if an inflammation exists in a certain spot, and we employ a remedy strong enough to set up a fresh action, the weaker and pre-existing state is smothered, and, as the artificial one produced only exists so long as we use our remedy, it follows that it disappears when we discontinue its use, and the tissues recover their

balance. "Conatus conatu, consuetudine consuetudo, quasi clavus clavo retundatur" (One habit drives out another, as one nail drives out another).

To bring about this result we have many weapons. Blistering fluid is used by some; the salts of zinc, painting the eczematous surface with solution of potash, strong mercurial or sulphur ointments, strong lotions of carbolic acid, and many more are employed, and employed with success. Personally, I have now for some time been so satisfied with the action of Hebra's "Tinctura saponis viridis cum pice," made with equal parts of common Stockholm tar, spirit of wine, and soft soap, that I can most strongly advocate its use. The way to apply this combination is to direct your patient to clear away as much as possible the surface accumulation, and then to rub the tincture firmly into the eczematous area with a piece of flannel squeezed out of boiling water until it ceases to drip. The rubbing should be continued for ten minutes, three times a day, until the surface is tender. The part should then be sponged over with the egg-

and-water mixture, and a soothing ointment applied on linen rags. The one used in acute eczema answers very well. Where the eczema is very old and much thickened, I sometimes advocate a piece of flannel to be saturated with the tincture and laid upon the surface affected for several consecutive hours.

We must be on our guard in using this potential remedy. Some skins are a good deal irritated by its use, and, when such is the case, the oil of cade may be substituted for the tar; or, to produce the fresh action, simply scrubbing the surface with a good soap will suffice. Even then we are obliged, in the young especially, and sometimes in delicate skins, to attain our object by an ointment such as the following, which I have largely employed :—

℞ Zinci oxidi, ʒj.
Pulv. lapis calamin., gr. x.
Acid. carbolici, ♏x.
Unguent. hydrarg. nit., ʒss.
Adipis, ℥j.—Misce.

If the eczema is an extensive one, such as we meet with in old people, a tar-bath made in

the proportion of a table-spoonful of solution of tar to each gallon of water will bring about the desired result.

A chapter on the external treatment of eczema would not be complete without drawing attention to the influence of particular treatment in certain varieties of the disease —treatment which experience teaches us is best. The following are rules which I have found aid me much in treating eczema.

Eczema of the scalp yields to the following ointment, which is applied after detaching the secretion by the means advocated :—

℞ Hydrargyri oxidi rub., gr. xv.
Ol. olivæ, ʒiv.
Ol. amygd. amar., ♏ij.
Glycerinæ, ♏xx.—Misce.
Adipis recentis, ʒiv.

Eczema of the hairy portions of the body, especially the variety met with on the face, is cured by ordering the patient to shave, and afterwards to rub in an ointment made with half a drachm of sulphur and carbonate of potash, mixed with one ounce of hog's lard.

Eczema of the legs is often treated success-

fully by an ointment which Hebra first used, made as follows :—

℞ Plumbi oxidi, ʒss.
Emplast. plumbi, ʒj.
Ol. lavandulæ, ♏iij.
Ol. olivæ ad ʒj.—Misce.

This remedy is spread upon strips of linen and kept constantly applied by means of a bandage.

General Management of Eczematous Patients.—Broadly speaking, the sufferers from eczema are better without highly spiced foods or alcohol, both of which excite the cutaneous circulation. They should not get too near the fire—a tendency which they have owing to the chilliness from which they suffer. They should not have too much clothing on their beds. Both these bring too much blood to the surface of the body.

We must impress upon them the absolute necessity of refraining from scratching. Scratching to allay itching is a pleasant process, and, in the young and the idle, often irresistible. To allay the itching of eczema, I know of nothing which is more

INDEX.

A

PAGE

Anderson 18, 47, 64, 89
Andrews, Dr. 26
Arcus senilis 5
Arsenic 120
Axillæ, eczema of 92

B

Bacillus 17
Balsams 3
Baths 128
Bird, Golding 37
British Museum patient 9
Brow, eczema of 50

C

Catarrh 4
Cheiropompholix 71
Chicken-pox 5
Cottle, Wyndham 37
Cradle-cap 67
Cure of eczema 113

D

PAGE

Dartre stalactiforme 94
Dartrous 11
Diathesis 1, 2
Diet 38
Dysidrosis 71

E

Ears, eczema of 93
Ectropion 91
Eczema, acute 81
,, always itches 23
,, chronic 119
,, does not become universal during middle period of life 32
,, ,, leave a scar behind . . . 30
,, due to animal parasites . . . . .
,, ,, vegetable ,, ...
,, hypertrophicum 103
,, impetiginodes 6
,, inflammatory process has an indistinct edge . 22
,, initial lesion may be an erythema . . . 25
,, ,, ,, a fissure . . . 29
,, ,, ,, a papule . . . 28
,, ,, ,, a pustule . . . 28
,, ,, ,, a vesicle . . . 26
,, marginatum 74, 109
,, may be caused by activity in the tissues . 42
,, ,, ,, discharges from orifices . 46
,, ,, ,, friction 48
,, ,, ,, irritation produced by animal parasites . . . 47
,, ,, ,, irritation produced by vegetable parasites . . 47
,, ,, ,, obstructions to the circulation 45

PAGE

Eczema may be caused by pruriginous states and scratching 52
„ never a congenital disease 33
„ not contagious 33
„ of the anus 102
„ „ fingers and toes 106
„ „ flexors of the body 105
„ „ hairy portions of the body . . 86, 126
„ „ legs 109, 126
„ „ lips 99
„ „ nails 106
„ „ nipples 100
„ „ orbits 97
„ „ orifice of the vagina 105
„ „ orifices of the body . . . 93, 97
„ „ „ „ nose 98
„ „ penis and scrotum 107
„ „ scalp 126
„ „ smooth portions of the body . 93, 96
„ „ umbilicus 101
„ parasitic 106
„ pilare-faciei 89
„ rimosum, of the anus 103
„ „ „ lips 100
„ „ „ nipples 101
„ „ „ nostrils 98
„ rubrum 6
„ scabs, scales, vesicles, pustules, or fissures may always be found 32
„ siccum 6
„ squamosum 67
„ treatment of 112
„ usual tendency to persist 19
„ when pressed upon, yellow stain remains . 21
Eczematous diathesis 3
Elephantiasis 7

PAGE

Epiblastic structures 5
Epithelial „ 7
Erysipelas 7
Erythema 57

F

Forehead, eczema of 95
Fuller, C., case of 65

G

Garrod 37
Greet 32, 37

H

Hardy 11
Hay fever 2
Hebra 17, 35, 54, 56, 78, 118, 122, 124
Herpes 57
Herpetic 11
Hiskins, J. 81
Hunter, John 123
Hutchinson, Jonathan 1, 12, 18, 39

I

Idiosyncrasy 1, 2
Impetigo faciei-rubra 80
Irritants 3, 47

L

Laycock, Professor 1
Lichen planus 68, 80
„ ruber 57, 68, 88
Lupus erythematosus 57, 72

M

PAGE

Maunder 111
Mentagra flavescens 96
„ nigricans 96
Mercury 2
Milner 43

N

Niemeyer 67

P

Paget, Sir James 1
Parasites, animal and vegetable 47
Piffard 37
Pityriasis 6, 57, 67, 80, 97
Plica polonica 87
Pompholix 71
Porrigo 80
Pregnancy 41
Pruriginous condition 3
Psoriasis 57
Pubis, eczema of 91

R

Residence of eczematous patients 128
Ringworm 6, 73
Roose, Robson 37

S

St. John's Hospital 17, 25, 81, 83
Scabies 57
Scratching, conditions of 23, 53
Seborrhœa 67
Soap 125

PAGE
Squamous eczema 87
Stomatitis 10
Sudamina 57, 70
Sumner 26
Sycosis 90
Syphilis of palms and soles 74

T

Teething 53, 55
Temperament 1, 2
Trichophyton tonsurans 91

U

Urticaria 39

V

Vernix caseosa 67
Vulva, irritation of 22, 92

W

Wakefield, convicts at 43
Willanism 17
Wilson, Sir Erasmus 16, 18, 50, 103, 116

PRINTED BY BALLANTYNE, HANSON AND CO.
LONDON AND EDINBURGH