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alone, but the cure may, it is hardly necessary to remark, be hastened by appropriate local measures. In vagabonds' disease, the clothes and bedclothes should be boiled to kill lice and, if possible, the patient should be changed to a clean bed. After a preliminary bath, the crusts may be softened by sweet oil, boric-acid poultices or ointment, and removed. The bases of the ulcers are cleaned with hydrogen peroxide and covered by antiseptic surgical dressings. Gauze soaked in fifty-per-cent. ichthyol in watery solution is admirable for the purpose since it never starts a dermatitis of its own. The solid stick of silver nitrate is used to restrain exuberant granulations. In dispensary practice where elaborate dressings are usually out of the question, ecthyma heals readily under inunction with ten-per-cent. sulphur ointment, but its use must be stopped before it excites a reaction in the skin. Treatment of underlying cachexias must be left for consideration in their proper places.

James C. Johnston.

ECTODERM.—The ectoderm is the outermost layer of cells in the embryo, or outer germ layer. It is called ectoblast by some German, and epiblast by some English writers. The cells early arrange themselves so as to form a distinct epithelium; in the median line of the embryo the cells become thickened and give rise to the so-called medullary groove, out of which the nervous system is developed, these median cells becoming entirely separated from the rest of the ectoderm, which thus becomes the embryonic epidermis. The epidermal ectoderm develops all the epidermal structures of the adult, and also gives rise to the epithelium of the auditory labyrinth and to the lens of the eye, as described in the special embryological articles.

Charles S. Minot.

ECZEMA.—(Synonyms: Ger., *Eczem;* Fr., *Eczéma;* Tetter; Salt rheum.)

Definition.—Eczema is an acute or chronic inflammatory disease, presenting a most varied assortment of cutaneous lesions, and accompanied by more or less intense itching, burning, or pain. The lesions consist, at first, of erythema, papules, vesicles, or pustules, which may subsequently form into crusts or weeping surfaces, or infiltrated and scaly patches.

General Symptomatology.—All eczemas possess certain characteristics and are associated with definite general symptoms which may be briefly referred to before taking up the study of the disease in its various phases. Eczema is distinctly an inflammatory affection, and as such manifests, in some degree or modification, the cardinal symptoms of that process. These are: (1) congestion, with swelling and increase of local temperature; (2) fluid exudation into the tissues, with the formation of vesicles and pustules, or with a discharge upon the surface, resulting in crusts and scales; (3) plastic exudation, producing papules, patches of infiltration, and thickening; and (4) subjective sensations of itching, smarting, or burning pain.

The character and intensity of these various symptoms will depend upon the acuteness or chronicity of the inflammation, upon the locality affected or the extent of territory involved, upon the inherent temperament or peculiarities of the individual, and upon his habits of diet, the nature of his occupation, etc.

(1) *Erythema.*—The erythema may vary from the bright red blush which is seen in the acute forms of the disease to the dull redness commonly observed in the more chronic erythematous varieties. The amount of swelling accompanying it is a varying quantity, dependent generally upon the acuteness of the inflammation. An increase of local temperature is always appreciable, more marked in the acute than in the chronic forms, but is never a very decided symptom, such as that accompanying some other inflammatory affections, *e.g.*, erysipelas.

(2) *Serous Exudation.*—Exudation is a part of every eczematous process, the form of lesion produced thereby being determined by the various influences already enumerated. Fluid exudate will produce swelling, vesicles, and pustules, and when rupture occurs there will be a weeping, moist surface which dries into crusts and scales. The crusts are often thrown off rapidly, leaving a more or less continuously weeping or moist patch, or areas of greater or less extent. This discharge has the peculiarity of stiffening linen with which it comes in contact.

(3) *Plastic Exudation.*—When the exudation is plastic, papules and dry scaly patches result, the scales being either fine and branny or they become agglutinated into larger flakes, which are sometimes quite thick. The former are usually seen in the erythematous type of the disease, commonly found upon the face, or in the dry scaly eczema of the scalp; while the latter are observed chiefly in connection with chronic squamous eczema. Infiltration is present in every form of the disease, but it is only in the more chronic forms, where the exudation takes place deep in the corium, that the thickening and infiltration so characteristic of the disease are found. When not too great it can be fully appreciated by pinching alternately the healthy and the diseased skin; but in some inveterate cases the skin is so densely infiltrated that it cannot be pinched up. If it is so situated that the natural movements of the part subject the infiltrated skin to stretching, very painful fissures and excoriations are produced, which are often very difficult to heal.

(4) *Itching, etc.*—The subjective symptoms of eczema are perhaps the most important of any, both on account of the great distress they cause and the influence they exert in keeping up the disease. These symptoms vary greatly in the different cases and in the different forms of the disease, and even at different times in the same individual. In some cases there is merely a slight tingling or pricking sensation, or feeling of formication, while in the other extreme there may be most intense itching, which can be relieved only by deep and continuous scratching with the nails until a bleeding or oozing surface is produced. Between these two extremes various degrees of irritation are experienced. Sometimes, as in the acute and erythematous forms, smarting or burning is alone complained of. In other cases this amounts to a burning pain, without any itching or desire to scratch. The itching of eczema is, as a rule, paroxysmal or intermittent in character, aggravated generally by exposure to the air, and is invariably worse at night. Its character and intensity are likewise affected by the influences already mentioned, as having a bearing upon the general symptoms of eczema. Besides the itching or some of its modifications just enumerated, certain patients exhibit a most marked hyperæsthesia of the skin, particularly upon exposure to the air or the slightest contact of the clothing, and when certain remedies are applied to the skin.

In addition to the symptoms just described, certain characteristics in the course and evolution of the disease are common to all cases of eczema. The clinical picture varies from day to day, and in some cases, especially in children and infants, from hour to hour. Not only rapid changes in the severity of the process are to be expected, but the type of the eruption itself may change in a very short period of time. The reason for this will be apparent when we come to consider the various causes of the disease. Eczema either runs an acute course, remaining for a few weeks or a month when recovery takes place; or, as more commonly happens, it becomes chronic and may last for years or for a lifetime. It may be limited to only one region of the body or of an extremity, but more frequently it occurs in several localities, and generally in a symmetrical manner. Often the disease is more or less general in its distribution, and in rare instances it becomes universal. Its general tendency in every case is to progress, and spontaneous recovery is not to be looked for. No matter how severe or protracted the disease may be, there are usually no constitutional symptoms, although in the worst cases some impairment of the general health is manifested as a result of the persistent loss of sleep and prolonged suffering.

Eczema is so varied in its manifestations and so protean in character that to give a comprehensive clinical picture of the disease would obviously be impossible. It is necessary, therefore, in the further study of its symptomatology, to consider separately the various types of eruption which make up the symptom-complex of the affection. While this is essential for a clear understanding of the disease as a whole, it must not be forgotten that the several types about to be discussed rarely occur clinically in a distinct or pure form, but are often mingled one with another, or follow one another in rapid succession. This frequent and often very rapid change in the severity of the process and in the type of lesion has already been referred to as one of the chief characteristics of the disease.

For convenience of description the subject is divided in the following manner:

(A) Types of the eruption dependent upon the predominant, primary, anatomical lesion, namely, *eczema erythematosum, eczema papulosum, eczema vesiculosum,* and *eczema pustulosum.*

(B) Types dependent upon secondary changes in the preceding, namely, *eczema rubrum* or *madidans, eczema squamosum, eczema sclerosum, eczema verrucosum,* and *eczema fissum,* and

(C) Types dependent upon the stage or character of the inflammatory process, namely, *eczema acutum* and *eczema chronicum.*

The symptomatology, diagnosis, and treatment of the other special varieties of the disease, namely, *eczema infantilis, eczema parasiticum, eczema seborrhoicum,* and the regional forms of eczema will be considered separately.

A. Eczema Erythematosum.—This type of the disease occurs in its most characteristic form upon the face in middle-aged or elderly people, though it may affect any part of the body. It generally begins in small, irregularly shaped patches, of a more or less bright red color, which coalesce into larger areas. The face, however, may be acutely suffused, in which case there is considerable œdema, with closing of the lids and marked temporary disfigurement. When the affection is acute, after a few hours tiny vesicles develop upon the erythematous surface and some moisture or oozing is produced by the rubbing, which is resorted to in consequence of the itching. In the subacute form the color is a dull red, and slight scaling is to be observed, while in the chronic forms considerable thickening of the skin is produced, the natural lines being greatly exaggerated; the color in the more chronic forms varies from a dull red to a purple or brown and the scaling is more abundant. Itching and burning are the chief symptoms complained of, the former being so severe, especially when the disease is chronic, that the eyebrows are sometimes rubbed off in the efforts of the patient to obtain relief. The disease may be of very short duration, or may last for years, with intervals of slight improvement; this form is often spoken of as "*chronic erysipelas.*" Erythematous eczema of the extremities presents characters similar to those upon the face, though the scaling is apt to be more abundant, and here the type readily changes into the squamous form.

When it occurs upon the palms and soles the skin is thickened, red, and swollen, and is accompanied by most intense itching and burning. In the axillæ, beneath and between the breasts, or in the fold of the neck and groins in infants, the disease is of a brighter red color, and a moist oozing surface is produced. This form of eruption constitutes "*eczema intertrigo.*"

Eczema Papulosum.—The papular type of eczema is of very frequent occurrence, and is often one of the most obstinate forms met with. It is characterized by the appearance of firm, dull red, acuminate or rounded, raised papules, varying in size from a mere speck to that of a pin's head. These may develop in a discrete manner, scattered irregularly over the part affected without tendency to grouping, or form here and there into small groups or even coalesce into patches. When located about the hair follicles a lichen-like appearance is presented, and on this account the disease was formerly called "*lichen simplex.*" The number of lesions present at any given time varies considerably. Often they are sparsely distributed, but after a time the itching becomes so intense that new papules develop rapidly in consequence of the severe scratching induced. These are soon capped by a small blood crust or are severely torn, so that serum oozes from their summits. There is perhaps no other variety of eczema in which the itching is such a marked feature.

The disease may remain papular throughout or the papules develop into small vesicles and then into pustules, or become associated with other vesicular or pustular lesions. When they are grouped, or become more or less confluent, weeping patches with infiltration and crusting may form as a result of vigorous scratching. Sometimes the lesions present the flat character of those seen in lichen planus, and the color being dull red or purplish, mistakes in diagnosis are not uncommon. This form of papule generally occurs about the neck and flexor surfaces of the wrists, both common sites for lichen planus.

The life history of any individual lesion or group of lesions is extremely variable. The same papule may remain almost unchanged for weeks or may disappear quickly, only to be replaced by others in rapid succession. Sometimes a single small patch or several patches, without any other manifestation, will affect some particular location and resist the most careful treatment for long periods of time.

The distribution of the eruption is of considerable importance, particularly as regards diagnosis. The trunk, especially the back and buttocks, and the flexor surfaces of the arms, forearms, thighs, and legs are the regions generally affected. It rarely occurs upon the face, hands, or feet. The disease is more common in adults than in children or infants, the liability being about the same for both sexes.

Eczema Vesiculosum.—Vesicular eczema pure and simple is perhaps less commonly observed than any other type of the disease. It is essentially an acute process and speedily changes into some other form, or is associated with some more chronic variety. The attack is always preceded by tingling, pricking, or itching sensations, which are soon followed by a punctate or diffuse erythema, with more or less swelling of the tissues. After a few hours a number of tiny vesicles appear upon the reddened surface, which vary in size from a pin's point to a pin's head. These are pearly and transparent and have a very thin covering of epidermis. In some localities, as between the fingers and toes, and on their flexor surfaces, or on the palms and soles, which are the most common sites of the eruption, the erythematous stage is often wanting, the lesions appearing as minute transparent globules embedded in the skin. There is generally no tendency to grouping of the vesicles in this type of the disease, though they are closely packed together and sometimes even coalesce. In a very short time, even after the lapse of only a few hours, they either rupture spontaneously or are broken by the patient in scratching. Much relief from the itching is now experienced, but this symptom is quickly replaced by smarting or burning. The contents of the vesicles soon moisten the affected part, which is kept more or less wet by the oozing of serum from the vessels beneath, or is converted into a moist crusted patch. The serous crusts which form are of a characteristic yellowish color, and are never very thick. In some cases the crusts are continually washed away or are removed by contact with the clothing, leaving a red, angry, oozing surface, being thus converted into an "*eczema rubrum*" or "*eczema madidans.*" At other times the weeping diminishes and a scaly, red, infiltrated patch results, "*eczema squamosum.*" Under appropriate treatment, however, neither of these secondary forms develops, but resoiution takes place by a gradual subsidence of all the symptoms. New vesicles cease to appear, the oozing becomes less and less, the surface heals beneath the crusts, and there is left a sensitive,

slightly reddened skin, which in a few days becomes normal. Besides the secondary forms of eczema just referred to, into which the vesicular type of the eruption may develop, secondary inoculation frequently takes place with the production of a pustular eczema.

It must likewise be remembered that vesicular eczema is often associated with the other primary forms, appearing as an acute outbreak at some time during their course. In addition to the sites already mentioned, the disease may develop upon the face, on the flexor surfaces of the forearms and thighs, and less commonly upon various parts of the trunk; it is seldom, however, general in its distribution.

Eczema Pustulosum.—This type of the disease, which is sometimes called "*eczema impetiginosum*," usually begins in one of the preceding forms, the character of which is changed either by an increased intensity of the inflammation or by secondary infection by pus germs. It is possible for the eruption to develop *de novo*, but this is quite the exception. Any diseased condition or physiological state that will diminish the natural skin resistance against the incursion of pathogenic organisms predisposes to this form of eczema. It is therefore more common in infants, especially in the strumous and ill-nourished, and in elderly people. It is seen in its most characteristic form upon the head and face of infants, where from very early times it has been known as "*crusta lactea*," or the "*milk crust eruption*."

It generally begins in a group of papules or an erythematous patch, which speedily becomes moist and crusted from the subsequent development of vesicles. Infection soon takes place from the wounding of the surface by the nails, and thick greenish crusts form, which, when matted with the hair on the scalp, emit a most nauseous odor. It usually occurs symmetrically on both cheeks and around the ears, but in very bad cases may cover the entire head. In elderly people it is most frequently observed upon the lower legs, where it may affect only the region around the ankles or may cover the entire leg with thick, dirty greenish crusts.

Pustular eczema may also attack the bearded face and the hairy region of the thighs, in which case it must be differentiated from sycosis and folliculitis. Eczema, however, is never confined to the follicles, but also affects the intervening skin and often spreads to non-hairy parts.

The itching of pustular eczema is less marked than in some of the other varieties of the affection. Except in very rare instances, in which deep wounds have been made, this eruption is never followed by scarring or permanent loss of hair.

B. Eczema Rubrum or Eczema Madidans.—Eczema rubrum may develop from any of the preceding varieties, but, as already mentioned, most commonly follows vesicular or pustular eczema. It often results in consequence of improper treatment. The patient's occupation or his injudicious care of the eruption may likewise be responsible.

It is characterized by intensely red, inflammatory patches, or diffuse areas which continuously exude a clear serum that subsequently dries into brownish or green crusts of variable thickness. These in turn are loosened by the accumulation of serum beneath, or are forcibly removed by contact with the clothing, producing an intensely red, infiltrated, and continuously weeping surface. This constitutes one of the most distressing forms of eczema, as it is generally chronic in its course and the subjects of it suffer intense pain most of the time.

It is especially common upon the lower legs of elderly people and often covers the entire leg, accompanied by much œdema and great infiltration. It also occurs on other parts of the body, particularly in regions where there are heat and moisture, as in the axillæ, in the folds of the breasts, nates, etc.

Eczema Squamosum.—While in the preceding variety of eczema the peculiar clinical symptoms are due to the great intensity of the inflammatory process, in this, the squamous form, the acute catarrhal characters are in abeyance. By a subsidence of the discharge and a diminution in intensity of the inflammatory symptoms, eczema rubrum may subsequently become squamous eczema. It is more commonly, however, a sequel of eczema erythematosum, but is often an intermediate form occurring at some time during the involution of some of the other primary types. Papular eczema, by coalescence of the lesions, may likewise develop into this form of eruption. Squamous eczema generally appears in variously sized, irregularly outlined patches, some oval, some elongated, and when of long duration quite sharply defined. The color is a dull red, and there are always considerable infiltration and scaling.

The scales are not large and flaky and are not firmly attached as in psoriasis, but usually brush off quite readily.

When the affected skin is irritated by severe scratching, a weeping surface may result with the production of serous crusts, an event that is liable to occur in any form of eczema. The most common localities for squamous eczema are the scalp, face, and back of the neck. Patches of the disease are also frequently observed on the outer surfaces of the arms, on the extensor surfaces of the thighs and legs, and sometimes upon the trunk.

Eczema Sclerosum.—This clinical type is observed practically only upon the palms and soles. It begins as an ordinary eczema of these parts which becomes chronic and results in great thickening of the tissues. The epidermis presents a calloused appearance, and is often so hard and stiff that flexion of the hands or fingers is rendered impossible. In those who labor with their hands the disease is seen in its highest development. It simulates very closely the symmetrical keratoses, either hereditary or acquired, but is always readily distinguished by the fact of there being a pre-existing eczematous condition.

Eczema Verrucosum.—As the name implies, this is a warty form of eczema. Besides the induration and thickening there is papillary hypertrophy resulting in a rough, warty surface that bears very little resemblance to an eczema.

The most characteristic examples of verrucous eczema are seen upon the lower legs, where it sometimes attains such a high state of development as to resemble an elephantiasic condition. The natural contour of the limb is generally destroyed and the diseased surface emits a sickening odor from decomposing secretions retained in the deep sulci between the warty growths. This form of eczema occurs also in other localities, as in the axillæ, about the genitals, beneath pendulous breasts, etc., wherever, in fact, heat, moisture, and uncleanliness favor epidermic and papillary hypertrophy.

Eczema Fissum.—Any eczema affecting regions in which the skin, from its anatomical position, is subjected to more or less movement or stretching, is very prone to develop rhagades or fissures; this complication constitutes eczema fissum, or "*eczema rimosum*." The eczematous process renders the skin inelastic and it cracks very readily. These fissures may extend only through the epidermis, but generally they go much deeper, even penetrating the upper part of the corium. They are extremely painful, bleed very easily, and often last a long time, if so situated that the part cannot be immobilized. Fissures may complicate any of the primary forms of eczema, although the erythematous and papular types are more liable to develop these secondary changes. Eczema fissum is most commonly seen upon the palms of the hands and soles of the feet where it frequently results from an eczema sclerosum, upon the flexor surfaces and tips of the fingers, behind the ears, and in the flexures of the limbs. It is likewise often observed at the junction of the skin and mucous surfaces, as the corners of the mouth and around the anus.

The condition commonly known as *chaps* or *chapping* may or may not be associated with eczema. It very frequently occurs in those having delicate skins, but having no history of eczema nor tendency to that condition.

It results from the use of irritating soaps, excessive use of hot water, exposure to cold winds, etc.

C. Eczema Acutum and Eczema Chronicum.—This is a very important division of the subject, especially from a therapeutic standpoint. The term acute eczema refers both to the intensity or inflammatory character of the eruption and to its duration. We call an eczema acute when it begins suddenly with redness and swelling, accompanied by an itching, burning, or tingling sensation. It may appear in one or several localities, or may spread from one focus over an entire limb or large area of the body. It may remain an erythematous eczema or papules, vesicles, or pustules may develop, resulting in weeping patches or scaly and crusted areas. It often presents many characters of a simple dermatitis, but if the affected skin is carefully protected and treated by soothing remedies, the disease slowly subsides and the attack is of comparatively short duration. On the other hand, this same character of eruption may extend over long periods of time with alternating intervals of quiescence and acute exacerbation, so that while the disease in such cases may be justly called chronic, the eruption is always acute in character, and must be so considered in its therapeutic management.

Chronic eczema, clinically speaking, is characterized on the contrary by infiltration and thickening of the tissues, and generally occurs in the form of thickened, scaly, dull red patches or infiltrated areas of varied extent. It may affect any given locality as the scrotum, bend of the elbows and knees, etc., and may resist treatment for years; or it may become fairly universal, the entire skin being greatly thickened and scaly, the natural lines exaggerated, the whole of a dull red color, and imparting a distinct leathery sensation to the touch. The itching is often so intense that the hairs are rubbed off in efforts to obtain relief, or secondary changes take place as a result of the vigorous scratching to which the skin is subjected. Fissures and cracks, already referred to, are a common complication, as are also furuncles and ecthymatous lesions, and various secondary manifestations due to inoculation with pathogenic germs. The most stimulating and revulsive measures are often necessary in the treatment of the eruption in this stage. It must not be forgotten, however, that an eruption of an acute type may develop from time to time during the course of a chronic eczema, necessitating the employment of only the most soothing remedies.

Besides the acute and chronic stages of eczema, there is a subacute form which occupies both clinically and therapeutically an intermediate position. Very many of the cases which apply for treatment present an eruption of this character, but, with a clear knowledge of the clinical features of acute and chronic eczema, the physician will find no difficulty in recognizing the disease in its intervening stages.

Pathology.—The pathological changes in eczema are those of ordinary inflammation. That it is a catarrhal inflammation of the skin, similar to that affecting mucous membranes, is conceded to-day by most observers, and the pathological findings in the majority of cases certainly lend support to this view. Duhring, however, thinks we ought not to insist too strongly on this point, inasmuch as many of the manifestations of eczema differ from those observed on mucous membranes. The causes operative in the production of the skin changes are far from clear, in spite of the great advances made in cutaneous pathology during the past ten or fifteen years. There is, in the first place, something in the skin of an eczematous subject that renders it susceptible to the action of irritants of either local or internal origin. What this is we do not know, but presume it to be some nutritional defect. What the exciting cause is that sets up the inflammatory changes in this impaired or weakened skin is yet to be ascertained. Much has been done in recent years in the study of micro-organisms in connection with this disease, but it still remains unproven that any particular parasite is the exciting cause of eczema. On the other hand, it seems reasonable to believe, in the author's opinion, based upon the accepted teachings in general pathology, that the various micro-organisms found in eczema are rather the result of, than the cause of the local manifestations of the disease. It seems much more plausible, considering the varied etiology of eczema, and its dependence in most cases upon constitutional derangements of one form or another, to regard toxins circulating in the blood as a probable exciting factor in the production of the lesions.

Crocker is inclined to believe with Hebra and Tilbury Fox that eczema, when not due to local irritants, is a trophoneurosis, either central or peripheral. In support of this view are the cases in which inflammatory changes have been observed in the nerves supplying an eczematous patch.

Pathological Anatomy.—The morbid anatomy of eczema, as already mentioned, is that of ordinary inflammation, consisting in hyperæmia, dilatation of the blood-vessels of the corium, exudation of serum resulting in œdematous swelling, and diapedesis of white blood cells.

There are also connective-tissue cell proliferation and degeneration of the rete cells. These changes vary according to the stage of the disease. In acute eczema the inflammation is diffuse except in the papular form, when it is more circumscribed. The primary changes are in the papillary layer, from which they extend to the epidermis, to the deeper parts of the corium, and in some cases even to the subcutaneous fatty tissue. They consist in blood-vessel dilatation, serous exudation, and diapedesis of the white corpuscles. The detritus resulting from the destruction or degeneration of the rete cells mingles with the serum to increase the œdema. Vesicles in acute eczema are situated in the upper part of the rete. The cells degenerate with the formation of spaces between the nucleus and protoplasm, which enlarge into a cavity containing serum, cell fragments, and fibrin. When the exudate is excessive, the horny layer is raised from the rete, forming bullæ or large vesicles.

If there is an extensive cell degeneration, the cavity of the vesicle is filled with leucocytes and is converted into a pustule; here pus organisms are always to be found. In eczema rubrum there is, instead of the formation of vesicles or bullæ, an entire removal of the horny layer, which, on account of deficient keratinization, is not restored, leaving the corium exposed. In acute papular eczema the changes are limited to a circumscribed area and, according to Robinson, take place primarily around the follicles, especially the hair follicles.

The morbid changes in chronic eczema consist in an hypertrophy of the rete, an enlargement and lengthening of the papillæ, and a thickening of the corium by an enormous proliferation of connective-tissue cells. In some cases the tissues may become so dense as to result in lymphatic obstruction and elephantiasic changes. The glandular structures, as well as the hair follicles, may become atrophied or even entirely destroyed in the more chronic forms of the disease.

Etiology.—Eczema constitutes in this country about one-third of all cutaneous affections. It is by far the most important disease of the skin which the general physician is called upon to treat. It affects men and women in about equal proportion and occurs at any age from the earliest weeks of life to old age. The greater number of cases are observed between the ages of twenty and forty, the period of greatest activity in most people's lives. The disease is never inherited in the true sense of the term, but, as in the case of so many other troubles, a tendency or predisposition to eczema may be inherited. In such the disease is readily lighted up, often by the most trivial agencies, that would not be deleterious in any way to most persons.

Eczema, as far as we know, is not a contagious disease, though certain forms are parasitic in nature; some of these latter are autoinoculable.

The causes of the disease may be conveniently arranged under two headings, those of *internal* or *constitutional origin*, and *external* or *local causes*. No single cause is ever responsible for a given attack of eczema, its etiology