

margin of the new growth and at those points where the arteries give off branches to the papillae. The disease extends along the vessels of the corium.

DIAGNOSIS.—This is not usually difficult, as the symptoms are so characteristic as to render an error almost impossible. From a simple cicatrix keloid is to be distinguished by its course, color, contour, consistence, elevation, and frequently by the presence of pain. The diagnosis between spontaneous and spurious or cicatricial keloid is of no special importance. Hypertrophic scar differs from it in not extending beyond the limits of the injury, and in the facts that claw-like prolongations are absent, and that the tissue of the new growth is less pinkish in color and less permanent. Morphoea or scleroderma circumscriptum, occurring in raised patches, may simulate keloid to some extent; the latter, however, differs from the former by being more vascular, denser, and more elevated and by having claw-like prolongations.

PROGNOSIS.—The prognosis is unfavorable. Spontaneous involution is of rare occurrence. According to some observers, a keloid which has developed on a syphilitic scar is more apt to undergo involution. The growth does not interfere with the general health and may, after having attained a certain size, cease to enlarge and remain stationary.

TREATMENT.—The treatment of keloid is unsatisfactory; plastic surgery has accomplished very little in this affection. When removed with the knife or with caustics the growth is almost certain to return, and usually in a more aggravated form than before operation. According to Dühring caustic potash offers the most efficient remedy if an operation is insisted upon; he advises, however, against its employment if the disease is increasing. Erasmus Wilson paints the growth with a spirituous solution of soap and potassium iodide, and then keeps it constantly covered with lead plaster, spread on wash leather. Pressure with flexible collodion resulted in a cure in Professor Da Costa's hands in a case ensuing after variola. Pressure carefully applied with an elastic bandage has proved successful in Verneuil's hands; it should be distributed in such a manner as to avoid friction which might have a tendency to favor the growth of the tumor. Hardaway reports good results in one case from electrolysis; it is not safe, however, to employ a strong current for fear of stimulating the growth. Multiple scarifications, frequently repeated, have been followed, according to Vidal, by complete cessation of pain and diminution in the size of the growth. Severe pain may be combated with hypodermatic injections of morphine or cocaine. Chloroform liniment and applications containing belladonna or stramonium or emplastrum hydrargyri may also be resorted to for this purpose. Internally quinine, potassium iodide, and arsenic have been employed, but they are all of questionable utility. Local applications of remedies which promote absorption, such as tincture of iodine, iodized glycerin, etc., have all been found to be ineffectual. Recently Dr. Marie (*La Sem. médicale*, 1893, No. 14) has advocated injections into the keloid of a twenty-per-cent. sterilized solution of creosote in oil with a Pravaz syringe; this operation, as he states, being soon followed by slight swelling and paleness of the tumor, and also by pain which may last for several hours. After a lapse of two to three days the tumor assumes a violet-blue color, a vesicle forms on its surface, and then later the whole growth undergoes a transformation into a dry cicatrix. It is stated that by this process the tumor is embalmed and the skin in the neighborhood of the keloid does not become inflamed. *Emmanuel J. Stout.*

KERATIN.—The important constituent of the corneous layer of the skin and its appendages, extracted for use as a resistant coating against the gastric secretion. It is chiefly obtained from quills, or from horn. Various methods of preparation are employed, their object being to eliminate such substances as can be attacked by the gastric juice. One of these methods consists in eliminating such substances by maceration in a solution of hydrochloric acid and pepsin and extracting the residue.

Besides being insoluble in the gastric juice, it is so in alcohol and water, but is soluble in strong acetic acid, also in alkalis, hence in the duodenal contents. Keratin is used to coat pills containing substances, the action of which upon the stomach or upon its contents is undesirable or objectionable, but which is serviceable in the intestine. It apparently has no action of its own, except slightly as an albuminoid nutrient. *Henry H. Rusby.*

KERATODERMA PALMARE ET PLANTARE.—(Synonyms: *Keratoma palmare et plantare, hereditarium, ichthyosis palmaris et plantaris, tylosis palmae et plantae.*)

DEFINITION.—Keratoderma of the palms of the hands and of the soles of the feet is an affection characterized by a thickening of the horny layer, of a leathery consistence, yellow or brown in color and more or less symmetrical.

From a purely clinical point of view, much vagueness is attached to the term keratoderma, as it includes thickening of the palmar and plantar epidermis, the result of several and distinct causes—lupus for example, which is associated with a diminution in the epidermal tissue, except at the extremities, where it associates itself with hyperkeratosis. Dry eczema may show at all points an increased production of horny tissue, from which an extensive desquamation results, while at the palms and the soles the horny substance accumulates in such a manner as to cause the condition known as keratoderma. On the other hand, in default of the histological characteristics, we take the word hyperkeratosis, in a strictly clinical sense, to mean hypertrophy of the horny layer. Nevertheless, it is generally maintained that the palms and the soles are regions specialized by their structure; that no analogy exists between them and the other parts of the body by reason of their situation, their necessary exposure, and the exterior influence to which they are continually subject, showing that the hands and the feet should be affected in the same manner by the same disease. There can be no doubt that in the future, no matter what classification is adopted, the diagnosis will be founded upon characteristics revealed by the microscope. For upon microscopic examination depends the differentiation of the great variety of palmar and plantar hyperkeratoses. As they are the outcome of very different conditions and diseases, some being generalized, or diffused, while others are localized, a comprehensive and satisfactory classification becomes extremely difficult.

SYMPTOMS.—The Besnier classification embraces four principal divisions:

I. The symmetrical keratodermata of the extremities, congenital and hereditary, with or without naevi on any portion of the body. As a rule, the disease has been observed during the first weeks of life, yet its development has often been delayed until the close of the year, or even as late as the third or fourth year. It begins as a diffuse redness of the palms and soles, and later becomes scaly; after which the redness disappears, when the condition establishes itself and the epidermal thickening commences. At certain points it may become circumscribed and resemble a callus (Plate XXXVII, Fig. 2). In the folds of the flexures there are often deep rhagades. In extreme cases the horny layer is ploughed into fissures of a greater or less depth. The abnormal epidermal thickening of the involved areas generally stops abruptly, conforming to the outline of the palms, but quite often it extends to the back of the fingers. The horny carapace sometimes preserves its natural color—an amber yellow—or may become gray or black by the penetration of dust. Its surface is wrinkled, and it desquamates in the form of irregular masses.

This special type is not always well defined—in some cases it builds limited plaques. It may sometimes affect other parts of the body, such as the knees and elbows. Once established, the disease continues indefinitely and is likely to be worse in winter.

II. The common symmetrical keratodermata which develop in adults, possibly related to some central neurosis, are erythematous and influenced both by weather and by

EXPLANATION OF
PLATE XXXVII.

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FIG. 1.—Hyperkeratosis of the Sole of the Foot following Eczema. Model No. 2062 (M. Baretta), Balzer.

FIG. 2.—Congenital Keratoderma of the Palm of the Hand. Model No. 1832 (M. Baretta), Dupré and Mosny.

(From *La Pratique Dermatologique*, 1901.)



FIG. 1.



FIG. 2.

KERATODERMA PALMARE ET PLANTARE

manual toil. These lesions of hyperkeratosis are disposed superficially at the palmar surface of all the fingers, and at the anterior and inferior extremities of the metacarpus, especially near the summit of the thenar eminences. The keratinized patch is usually surrounded by an erythematous border, and upon removal of the horny layer even the elongated papillae give evidence of hypertrophy. There is no pain except when caused by fissure; the condition is usually associated with hyperidrosis. The nails are often affected. On the feet the keratosis is better defined than on the hands.

III. The keratodermata of the extremities, which develop like foci in isolated and multiple islets on the palms of the hands and the soles of the feet, are out of all proportion to the degree of pressure which may have been brought to bear upon these parts, and it is therefore permissible to believe that the disease has a trophic or central origin. There are several varieties, of which the most remarkable one has the orifices of the sudoriparous glands for foci; these are distended by horny plugs resembling comedones and possessing concentric lamellations. Belonging to this class are the symptomatic keratodermata, when limited to the palms and soles, and also when associated with some general dermatosis. In this group it is also proper to consider the type produced by arsenic and the types due to palmar and plantar localization of eczema, psoriasis, lichen planus, pityriasis rubra, and syphilis. Hyperkeratosis is one of the principal effects of a prolonged ingestion of arsenic, most marked in the palms of the hands and the soles of the feet, though it may involve the skin elsewhere. The thickening is not necessarily confined to the palmar or the plantar surface, but may extend to the adjacent parts. In the mild variety, which is not very rare, the palms and soles become slightly dry, and the epidermal markings coarse and exaggerated, mixed here and there with small, white, horny granules about the size of a pinhead, which can readily be removed. In the more pronounced forms, which appear only after arsenic has been taken for a long time, the horny layer assumes a uniform thickness, compact in structure, amber in color, very supple to the touch and without rhagades. At other times, however, it becomes grained or shagreen-like, with hyperidrosis, in which case the palms are soft and humid. Should the sweat be but normal the skin will be found usually dry. Palmar and plantar keratoderma occurs most frequently in association with eczema. It may not only attack the hands, but (more rarely) the feet alone; it often attacks all the extremities. It may be symmetrical, but usually one side is affected more than the other. Itching is a constant symptom, although at times it may be but slight. Palmar and plantar keratoderma is a disease specially belonging to old age. The keratized eczema of the soles presents about the same characteristics as that observed in the palms, although the hypertrophy of the horny layer is more marked (Plate XXXVII, Fig. 1). It forms a hard, gray, more or less black shell around the heel, displaying a mass of quadrangular crevasses characterized by long and deep rhagades which run in various directions, and cause the patient considerable discomfort. While hyperkeratosis has frequently been noted as a complication of eczema, it is nevertheless unusual in the majority of cases. Palmar and plantar psoriasis begins with distinct papules which continue to develop at the periphery, the edges alone showing hyperkeratosis, in the form of a very distinct border surrounding the desquamating area. Lichen planus of the palms and soles is rare and is not always hyperkeratotic. It is found alike in the generalized and in the acute forms, in which the palms and soles are covered with papules having a hypertrophied epidermis. Later, in more chronic cases, these surfaces are covered with a thick, horny, yellow, and translucent layer. Syphilis may give rise to the development of keratoderma, and the latter differs with the various stages of the disease. During the secondary stages it shows itself especially on the palms of the hands. The older the lesion the thicker the epidermis, which slowly desquamates. In the tertiary stages palmar syph-

lides are more frequent and extensive; the areas often become infiltrated and covered with a thick, horny epidermis, frequently raised like collarettes and cut by deep rhagades.

IV. The keratoderma of the extremities, which appears at all ages under the influence of unaccustomed pressure, is not to be confounded with ordinary callosities. This variety readily responds to treatment and is usually curable.

ETIOLOGY.—Heredity is a dominant trait in the etiology of this disease, and, as in ichthyosis, tends to affect only one sex in the same family. From an etiological standpoint we should perhaps separate from this group acquired types appearing in adults. The most ordinary factor in the production of keratoderma is the remedial use of arsenic, although arsenical intoxication has resulted from drinking water which contained the drug, and, recently in England, from the use of beer containing it. Local irritations sometimes play a very important part; certain cases have resulted from contact with acids or alkalies, or from traumatism, such as the habitual use of tools. Another interesting class constantly met with is that induced by inflammatory changes of certain diseases, such as eczema, psoriasis, syphilis, and lichen planus.

PATHOLOGY.—The pathology, while meagre, corresponds in general with that of callosities. Besnier and Balzar have noted that the horny layer for a great part of its depth is infiltrated with eleidin; that there is an increased thickness of all the layers of the epidermis; that the papillae are sometimes elongated and thinned and at other times thickened and shortened by reason of the multiplication of the cells which compose them. Beneath this layer of shortened papillae there is found, in many cases, a hyperæmia of the upper layer of the derma.

The histological findings reported by Brooks and Roberts in an article relating to the action of arsenic on the skin, as observed in the recent epidemic of beer poisoning, are here largely reproduced. An examination of sections of the lesions affected by acute erythematous hyperkeratosis showed that the pathological changes presented a hypertrophy of the epidermis, especially of the stratum mucosum. The cells were large, with well-proportioned nuclei; they had clearly defined walls, and revealed very distinct prickles. There was no edema or mitosis. An accumulation of horny cells appeared in the upper layers of the epidermis. If the skin had been subjected to the influence of arsenic, the vertical cells drooped and leaned to one side, and the nuclei changed their shape and were filled with pigment granules. Later, the process of degeneration set in, ending in atrophy. The rete almost entirely disappeared and at times only one or two rows of cells remained behind; the stratum granulosum and stratum lucidum showed marked evidence of degeneration, finally ending in atrophy of the sweat and sebaceous glands. The epithelium was reduced to a very thin layer, with the entire disappearance of the stratum lucidum, and showed horny plates. In the later chronic stages the whole of the epidermis was filled with pigment, producing a black discoloration. The excretory portion of the sweat glands was stained black by osmic acid, leading to the conclusion that the amount of fat had been increased.

DIAGNOSIS.—Keratosis palmaris et plantaris is to be differentiated from that produced by eczema by the absence of the well-defined inflammatory symptoms of that disease, by its appearance on other portions of the body, by the lack of variability in its symptoms, and by the limitations of the plaques. Palmar and plantar psoriasis is distinguished from the other forms of keratosis, at the beginning, by its distinct papules and, later, by the marginate disposition of the plaques—the border also showing the keratosis. Palmar and plantar syphilides are always to be considered with caution, and are especially to be distinguished from psoriasis of the same regions. The differences lie in the multiplicity of the lesions, their redness, the more marked infiltration of the border, and the presence of bulky and horny scales. The external appearances of arsenical keratoderma are very characteris-

tic; almost invariably there will be found a symmetrical hyperkeratosis of the hands and feet, with a horny layer which has an almost uniform thickness and is supple and without fissures.

PROGNOSIS.—Congenital keratoderma is an ailment of a most uncomfortable nature on account of its incurability. Sometimes it is so severe as to interfere with all manual labor which requires delicacy of touch. All the types of this disease that constitute a secondary manifestation are curable, although, in the most favorable circumstances, they are exceedingly obstinate to treatment, and require long periods for their permanent correction.

TREATMENT.—For the hereditary type of keratoderma, arsenic in large doses has been recommended, particularly the arsenite of sodium as suggested by Brocq. There are, however, many misgivings among physicians as to its virtue. The only practical treatment is local—the attempt should first be made to cure the rhagades by proper applications and by the removal of the horny masses. Afterward such measures should be adopted as will tend to arrest the persistent tendency, on the part of the epidermis, to reproduce layer after layer of a horny character. Hyperkeratosis due to arsenic is of course cured by discontinuing the use of the drug. When it is due to eczema the treatment consists in suppressing the local or general influence which has produced that disease. When it is the result of occupation or of contact with irritating substances, the occupation must be abandoned and the substances avoided. In fact, the internal treatment indicated for lichen planus and for pityriasis rubra pilaris should be carried out when keratoderma is associated with either of these affections. The local treatment in all types is about the same—prolonged maceration of the parts, followed by shampooing with green soap, supplemented by strong plasters of salicylic acid or resorcin. Mercurial plasters may also be used to advantage. A very good treatment is recommended by Unna; it consists in dressing the affected part with compresses immersed in a two-per-cent. solution of resorcin, and then enveloping these with rubber tissue. These dressings are to be worn at night, removed in the morning, and followed by an application of salicylic-acid ointment.

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KERATOHYALIN. See *Cornification.*

KERATOSIS FOLLICULARIS.—(Synonyms: Psorospermosis, *Psorospermose Folliculaire Végétante*, Ichthyosis follicularis, *Acne sebæcæ cornée*, Darier's Disease).

DEFINITION.—Keratosis follicularis is a hypertrophic affection of the general integument, characterized by pinhead- to pea-sized horny plugs, embedded in funnel-shaped dilatations of the pilo-sebaceous follicles. This rare affection of the skin was almost simultaneously described by White, Bowen, and Darier. It had, however, previously been recognized under other names, although positive histological proof was lacking. The interesting

observations of Darier relative to the striking cell forms that resemble coccidia and that are found in the skin lesions, and his first conjecture that these cells are parasites, resulted in very careful examinations on the part of many investigators, as well as the reporting of numerous cases. It has turned out, however, that White and Bowen were correct as to the nature of this disease and that Darier's protozoan interpretation was wrong.

SYMPTOMS.—The primary efflorescences appear in the form of pinhead-sized papules, more or less raised and covered with greasy scales that vary in color from a dirty yellow to a black brown. These scales cling together with considerable tenacity, and, when removed, frequently show on their lower surface a dingy, conical projection which may, although with some difficulty, be rubbed away, and which sometimes corresponds with the orifices of the sebaceous follicles and always with the funnel-shaped depressions of the upper skin which are independent of the follicles. The periphery of these primary lesions becomes expanded by the deposit of new, dirty-gray to black-brown foci the size of a lentil, which run together into large, irregular plaques, bordered at their edges by disseminated primary efflorescences, whose surfaces soon appear more or less glandular and warty. These efflorescences soon become flatter and rise above the level of the skin in the same manner; the plaques growing out of them may also attain considerable size. In one case reported by Darier, these hill-shaped efflorescences, devoid of epidermis, ran together on the pubes into large tumors, which were separated by deep furrows. They were bright red in color and showed numerous crater-like orifices containing secreted pus which emitted a decided odor. Besides these peculiar changes there were present, in almost all the recorded cases relating to the scalp, fatty yellow to brown, and often slightly warty, masses of scales penetrated by hair. Sometimes these were reddened, moist, and excoriated, at other times they were not essentially changed. The dorsal surfaces of the hands, feet, and fingers appeared at times to participate in the disease process. The nails were like almost habitually involved whether there were like changes in the fingers or not, being generally striated longitudinally and rent or fragmented at their free edges. In some instances the palms and the soles showed a considerable callous formation. In the course of the affection there were manifestations exhibiting distinct exacerbations and remissions. This condition at times almost disappeared, but no instance of actual recovery has yet been reported.

ETIOLOGY.—Its inception, in regard to the time of life, is very variable; generally it appears late in childhood, or early in youth, but in some cases it is deferred to a period between the ages of twenty and thirty-five years. In a case of Hallopeau's, the disease first appeared in the sixty-first year. It has been known to manifest itself in both father and daughter, which fact would suggest heredity.

The bacteriological examinations have been constantly negative. The theory advanced by Darier, and later elaborated by Wickham, that this variety of keratosis was due to the presence of psorosperms, or coccidia, has been abandoned even by those authorities themselves; consequently, the precise nature of the disease still remains wholly in the dark.

PATHOLOGICAL ANATOMY.—Upon this point all authorities have reported similar results. The changes chiefly occur within, or in close proximity to, the mouths of the pilo-sebaceous excretory ducts. These are dilated so as to form funnel-shaped openings, which are filled with a mass of horny cells continuous with the scales that cover the follicular opening. The wall of the follicle is composed of thick, horny layers limited to the rete cells. The epidermis generally appears more or less thickened. The rete Malpighii appears as if hypertrophied; the interpapillary prolongations are lengthened and press firmly against the corium. The epidermis and the horny masses constituting the summit seem partly to consist of horny lamellæ of normal appearance, but piled up one

upon another in great strands, partly composed of abnormally horny cells in which the nuclei are well preserved. A defective formation in the lower layers of the rete Malpighii, in association with degenerated cells, lymphoid cells and fibrin, and connected with the degenerated processes of the rete cells, is described as typical of the affection. There also appear in the epidermis numerous peculiar elements which Darier has designated as psorosperma. These round bodies, according to the same authority, are represented by corpuscles which show a more or less clearly defined cell and a granulated protoplasm, and are surrounded by a refractive membrane. Almost all authorities at the present time believe that the psorosperma of Darier are only degenerative forms of the rete cells, a conclusion which he himself has recently adopted, and are not an exclusive phenomenon of keratosis follicularis, but also occur in lichen ruber and lupus erythematosus circumula. Darier, however, firmly contends that their abundance constitutes a characteristic element of the disease. Besides these changes, there is an increased amount of pigment in the contents of the basal cell layer at the periphery of the efflorescence, while the horny layer contains but little or no coloring matter. This layer, however, shows more or less granular pigment. In the region of the elongated papillæ of the corium there is generally found a moderate infiltration, which has been described as consisting of plasma, connective-tissue or mast cells, and leucocytes.

DIAGNOSIS.—The diagnosis of a well-developed case presents few or no difficulties. One of the diseases it early resembles is lichen planus, although the horny plugs occupy the mouth of the dilated follicles. Large verrucous lesions in the inguinal regions are characteristic. It differs from molluscum epitheliale in not being so generalized, and invariably exhibits an enucleable mass containing the so-called molluscum bodies. The disease bears close resemblance to some types of ichthyosis, but careful study enables us to differentiate it. The lesions in the one undergo a definite and characteristic development not observed in the other.

PROGNOSIS.—The prognosis is unfavorable in nearly all the cases heretofore reported. The disease has lasted for years without undergoing spontaneous involution. The general health of the patient is unaffected, other than in the way of subjective sensations. Treatment has very little influence upon the disease.

TREATMENT.—The therapeutics of keratosis follicularis have hitherto been of little benefit. A heightened irritability of the skin limits the use of the common remedies employed in hyperkeratosis, such as salicylic acid, resorcin, pyrogallic acid, and chrysarobin. Sulphur, especially that form known as Vlemineck's solution, is applied to the affected places, after which they are to be scrubbed with soap and water, carefully dried, and then covered with some soothing application. In general, the remedies for eczema seborrhœicum should be tried, as there are striking analogies between the two diseases.

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KERATOSIS FOLLICULARIS CONTAGIOSA.—This type is the same as that which was formerly characterized by the name of acne sebæcæ cornæ, an appellation originally bestowed upon it by Dr. Prince A. Morrow, the term contagiosa having been added by Dr. H. G. Brooks, who was the first to observe this particular association.

The type begins with small, black points, usually seated on the elbows and knees, afterward extending up the arms and thighs and finally invading the greater part of the surface of the body. The face may also be affected,

while the scalp remains free; the distribution is symmetrical. The black points soon become prominent. Coupled with these are large, sharp-pointed comedones around which papules are finally developed, some of which become inflamed. The lesions mostly, although not exclusively, occupy the pilo-sebaceous follicles, and consist essentially of a hyperplastic proliferation of the epithelial cells, combined with modification of the process of keratinization which allows them to preserve their vitality during a longer period than that pertaining to inflammatory exudations. The lower layers of the stratum granulosum are primarily attacked, not only at the level of the sebaceous follicles, but also in the excretory duct of the sudoriparous glands, and in the interpapillary prolongations of the epidermis. No micro-organisms were found in the cases quoted by Brooks. The contagious nature of the disease was simply conjectured on account of its distribution and for the reason that it affected the entire family at the same moment.

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KERATOSIS PILARIS.—(Synonyms: Lichen pilaris, pityriasis pilaris, ichthyosis follicularis, *xerodermie pilaire*, *ichthyosis anérine des scrofuloux*, *cacotrophia folliculorum*.)

DEFINITION.—Keratosis pilaris is a hypertrophic affection, chiefly of young persons, characterized by the formation of small, horny elevations developed around the orifices of the hair, under the influence of a process tending to atrophy.

This form of hyperkeratosis, as now accepted, was originally described as a separate disease, first by Hyde, then by Brocq. It had previously been regarded as one of the manifestations of ichthyosis, with which it often coincides, but from which it differs in localization, histopathology, and evolution.

SYMPTOMS.—In its most common form, keratosis pilaris is characterized by pointed pinhead-sized elevations, developed around hairs, and consisting of an accumulation of horny epithelia around the lanugo hairs on the extensor surfaces of the extremities and trunk. In a more advanced stage, rounded papules appear with an acuminate summit, usually normal in color, hard to the touch and varying in size from a millet seed to a grain of hemp. Sometimes, however, the aspect of the part affected is more or less red, the condition being accompanied by congestion. The hair assailed is more or less atrophied, is seen to pierce each papule, and may be twisted; its calibre is often unequal and, when removed with the finger nail, its locality is marked by a depression. Brocq points out, at the side of these papules, incomplete elements, aborted, in the way of retrograde evolution. These are single spots, perifollicular, erythematous, or, in the last cases, representing cicatrices. The affection is sometimes pruriginous.

The middle portion of the back of the arms, as well as the forearm, the buttock, and the front of the leg above the knees, may be involved. The flexor surfaces, and the middle of the trunk alone remain free. On the face, the eruption presents peculiar characteristics; the prominences are very small and confluent, their presence asserting congestion. According to Brocq, the favorite seats of this dermatosis are the face and the forehead, where it forms two red plaques above the internal third of the eyebrow, occupies either the internal or external front of the ear, or is disposed in a vertical plaque reaching from the temple to the angle of the jaw. The space between the eyebrows, or the middle of the chin, in very pronounced cases, may be involved. The scalp presents desquamation like that of seborrhœa. Brocq has observed, in connection with keratosis, the formation of circumpolar papules and cicatricial atrophy, both of which he connects with moniliform aplasia of the hairs of the head and body. This condition corresponds to the ulerythema