redness spreads from the chest over the trunk and limbs, nor does the face escape; the horny layers scale off in stripes or in large lamellæ, which may even be two inches in length. Slight weeping may occur in some places; in others, a few flabby vesicles appear; the tense skin occasionally fissures on the flexor aspects of the joints. The nails and hair sometimes fall out. The skin returns to the normal in a few weeks, but relapses occur in a number of cases. In individual cases, the affection is restricted to the hands, and the horny layers may be drawn off like a glove.

It cannot be determined at present in how far we should include in this affection cases of so-called erythema toxæmicum after surgical operations, the scarlatina-like eruption after similar causes and in puerperal processes, also the scarlet eruption after typhoid fever, at first circumscribed, which terminates in branny and large shredded desquamation, also the similar exanthem after the administration of certain drugs, such as hydrate of chloral, quinine, digitalis, and also after extensive treatment with caoutchouc.

T. Fox [1] observed as a sequel of pityrias. rubr. that the hair-follicles presented themselves in rows with scales in their excretory ducts. This condition he calls pityriasis pilaris (lichen pilaris) and regards as characteristic of a preceding pityriasis rubra, but a similar appearance is observed occasionally after extensive psoriasis.

Byers [2] reports a case in which pityriasis rubra developed in an ichthyotic girl.

Liveing [3] regards pityriasis rubra as variety of eczema; he found that a slight exudation between the layers of epidermis is never absent. He also observed that albuminuria was always present, and that an improvement in the condition of the skin corresponded to a diminution of the albumin in the urine.

J. Hutchinson [4] includes under the term pityriasis rubra the usually fatal terminations of various chronic, symmetrical, obstinate affections of the skin, which are characterized by marked desquamation, thickening of the skin, absence of exudation. He assumes that they are due to a degeneration of the spinal cord.

Anatomy.—The anatomical changes in pityr. rubr. were studied by H. von Hebra [5] in two cases. In one he found a thick horny layer, a thin rete with infiltration cells, then the connective tissue profusely infiltrated with cells and numerous well-developed elastic fibres, here and there yellowish-brown pigment in the connective tissue; the papillæ had disappeared, the sweat-glands and sebaceous glands were absent, the hair-follicles and hairs very scanty. In the second case the epidermis and rete were of normal dimensions, the papillæ and subcutaneous connective tissue filled with a cellular infiltration, hair-follicles and sweat-glands present in abundance, no accumulation of pigment; small cells were collected around the vessels and sweat-glands.

B. Baxter [6] described the following changes: the rete Malpighi was not separated distinctly from the horny layer, as the zona granulosa had disappeared entirely; there was a very gradual transition from the polygonal rete cells, which stained readily, to the flat scales of the stratum corneum which remained colorless. Flattened, feebly stained nuclei, which lay parallel to the surface, could be recognized even in the uppermost layers of the enormously thickened horny layers. The papillæ were moderately enlarged, the interpapillary prolongations of the rete extended somewhat more deeply than normal. The cells of the hair-follicles appeared to be increased. According to Baxter, the almost muscular consistence of the thickened cutis at the beginning of the disease is due mainly to a fluid exudation which is absorbed before death.

[1] Med. Times and Gazette, 1873, i., p. 487.
[2] Ibid., 1880, ii., p. 375.
[3] "Diseases of the Skin," 1878.
[4] "Lectures on Clinic. Surgery," 1879.
[5] Vierteljahrschr. f. Dermat., 1876.
[6] Brit. Med. Journ., July, 1879.

The causes of the chronic and acute varieties are unknown.

Diagnosis.—The diagnosis of chronic pityriasis rubra is rarely easy. Redness, desquamation, moderate infiltration of the cutis are found in dry eczemas and in psoriasis, but in the latter there is a greater accumulation of scales than in pityr. rubr. and the papilla is injured and made to bleed more readily in psoriasis. Circumscribed plaques of pityr. rubr. and the dry forms of eczema which are not always preceded by a moist stage are often exactly alike. The diffuse forms of pityr. rubr. chron. are distinguished at once from general psoriasis and lichen planus by the characteristic primary eruption. It is distinguished from pemphigus foliaceus by the absence of stinking secretion, the dryness of the scales, the absence of eroded moist patches after the scales have been removed.

Treatment.—Treatment of the chronic form is almost hopeless. Applications of tar and inunctions of fatty substances often diminish the pruritus, and render the skin more supple; protracted baths after the application of tar act in the same manner. Diuretics are indicated when albuminuria is present and the perspiration is extraordinarily diminished. Great importance must be attached to a nourishing diet and roborants. The same indications hold in the acute forms, but these usually present a tendency to spontaneous recovery.

DERMATITIS EXFOLIATIVA INFANTUM (V. RITTERSHAIN).

G. Ritter von Rittershain [1] has observed a symptom-complex, which he described as dermatitis exfoliativa infantum, in a large number of children, from the age of about six days to five weeks. They often presented quite a marked dryness of the skin, usually with branny desquamation. The disease begins generally around the angles of the mouth, with a diffuse, at first pale, later deep-colored erythema, with a tendency to the formation of rhagades. The buccal mucous membrane is dark-red, with small, irregular, superficial losses of substance. The process spreads from the face to the trunk and limbs. The epidermis separates, usually after a small amount of fluid exudation has accumulated underneath it, in other places crusts form; the upper layers of the skin can be removed readily by slight mechanical action. The uncovered rete has a dark, flesh-red color, is shining, and dries in a few hours. The process of exfoliation gradually extends over the entire body; the thick horny layer of the hands and feet can be stripped off like a glove. Instead of drying of the rete, regeneration of the upper layers often occurs, attended with branny desquamation. The duration of the disease is usually seven to ten days.

The disease varies greatly in severity; it runs its course usually without fever or gastric disturbances. After recovery, the skin has a normal color, but presents a tendency to eczema. Furuncular eruptions always occur as a sequel, and lead to phlegmons, gangrene, and perhaps to a fatal termination from sepsis; this occurs in scarcely half the cases. Mild relapses occur sometimes after the lapse of about two weeks. It presents great similarity to the infectious diseases, but is not contagious. It occurs sporadically and epidemically. Boys are affected more frequently than girls.

[1] Centralztg. f. Kinderheilk., 1878, Bd. ii. Arch. f. Kinderheilk., 1880, No. 53.

Diagnosis.—It must be differentiated from erythema neonatorum, which occurs shortly after birth, while dermatitis exfoliativa develops, at the earliest, at the end of the first week; from erysipelas, which is always attended with increased temperature; from pemphigus, in which the non-affected parts have a normal color and the vesicles are distinctly formed.

Treatment.—V. Rittershain recommends roborants, nourishing diet, baths of 25° R., loosely applied clothing, application of dusting-powder to the eroded places, removal of crusts and scales with fine almond oil. Good results were obtained also from baths to which a decoction of finely cut oak-bark (100.0 oak-bark to 1 litre water boiled one to one and one-half hours, filtered, and ½ litre of the decoction added to a bath) was added. In furunculosis the pus must be evacuated.

PITYRIASIS ROSEA (GIBERT).

Described by Gibert as pityriasis rosea, and by Bazin as pityriasis rubra maculata and circinata, Horand' recently gave a detailed account of it under the term pityriasis circinata. The Vienna school deny its separate existence, regarding it as herpes tonsurans maculosus.

The disease often begins with mild fever, then little red patches, scarcely as large as a twenty-pfennig piece, and very slightly or not at all elevated, appear upon the throat or thorax; they are covered with a few branny scales, sometimes with a coherent, silvery-gray scale. In a few days, the patches spread concentrically, the central part is yellowish and covered with the finest scales, and peripherally the redness passes insensibly into the normal color. The affection spreads over the entire body, but rarely affects the face. If the scalp is involved, it looks like circumscribed, circular pityriasis simplex, but the hairs remain unchanged. If two or more enlarging circles coalesce, the redness disappears at the point of junction, and slight desquamation occurs. Pruritus is not a constant symptom. The disease lasts from four to six weeks and recovers spontaneously.

Horand assumes external agents as the cause; it appears to be not infrequent after profuse perspiration. According to this writer, it is not infrequent in childhood, particularly in boys; according to Bazin,[2] it occurs in the first half of life, especially in lymphatic, scrofulous individuals.

E. Vidal[3] has found, in this affection, very small spores scarcely 1 μ, rarely 3 μ in size; they are arranged in circles in the epithelium of the upper and middle layers of the epidermis, but occasionally in heaps in and about the epithelium; rarely chains of spores are seen, five or six spores have a diameter of less than 1 μ, and look like small black points arranged in lines. Clinically, however, Vidal distinguishes pityriasis circinata from pityriasis rubra; the latter lasts four to six weeks, begins at the middle of the thorax or back, spreads symmetrically over the trunk and limbs, while pityriasis circinata begins here and there without symmetry. The latter description leads me to consider Vidal's pityriasis circinata as identical with pityriasis rosea. On account of its varying size, he calls the fungus Mikrosporon anomæon s. dispar. Similar micro-organisms (cocci) are found in the scales of other desquamating dermatoses.

[1] Ann. d. Dermatol., Bd. vii., S. 325.
[2] "Affections Cutan. Artificielles," 1862, p. 226.
[3] International Medical Congress, 1881.

Diagnosis.—It must be distinguished from the erythematous and pityriasis-like stage of herpes tonsurans; the latter usually presents circles of vesicles, is separated sharply from surrounding parts, the tricophyton is found readily, and it yields only to energetic treatment.

It presents great similarity in some stages with lichen acnéique; the latter also shows yellowish discoloration of the skin, with branny scales in the centre, but the periphery of a lichen plaque usually contains small reddish papules which are covered occasionally with small dark crusts.

It is distinguished from a syphilitic roseola by the absence of desquamation in the latter, its normal centre, and the dark cherry-red color of the roseola, while in pityriasis rosea the centre is yellow and somewhat scaly, the periphery rose-colored or pale-red.

Treatment.—Active treatment is contraindicated. River-bathing or luke-warm baths, with or without the additiou of soap, soda, dusting-powder, and the like may hasten its course. The pruritus must be treated symptomatically.

PEMPHIGUS (ERUPTION OF VESICLES).

In pemphigus, vesicles develop over the entire body, either at once or in a number of exacerbations separated by variable intervals. It is divided accordingly into the acute and chronic forms.

Until recently, the existence of acute pemphigus was denied by eminent dermatologists, but its existence can no longer be doubted. It is not rare in the new-born and infants, and also in children to the age of four years, and occurs often in extensive epidemics. In a large number of cases it is undoubtedly contagious. Its frequent occurrence has been observed in maternity and infant hospitals, as well as in private practice. In 1841, Scharlan[1] reported a small family epidemic, and successfully inoculated himself with the contents of the vesicles. Thomas[2] reports a case in which a child suffered from the acute eruption twice in the same year. The disease often begins without general disturbances, occasionally with febrile movement, which is repeated at every marked exacerbation, and with vesicles which appear usually within two to ten days after birth, particularly in the neck and groins. In one case, pemphigus developed before birth (Winkel, Dresden, 1879). The eruptions follow irregularly, and often run their course in two or three weeks; in other cases, their duration may be prolonged over a number of months. Healthy as well as feeble children are affected, and the prognosis can never be made with certainty. An unfavorable termination occurs usually as the result of digestive disorders. With or without the previous formation of papules, more or less large, tense vesicles develop within a few hours; their contents soon become opaque, and are discharged, so that crusts rarely form; the rete is then laid bare, and has a reddish, often glistening look. The face is little affected, the palms of the hand and soles of the feet almost never. The vesicles have been observed occasionally upon the conjunctiva and buccal mucous membrane. Some authors mention the simultaneous occurrence of puerperal disease in the mothers. The action of the inoculated secretion of the vesicular contents develops in twenty-four to seventy-two hours, and is attended with burning, redness, and formation of vesicles.

Roeser always found micrococci in the contents of the vesicles. P. Gibier[3] (de Sa-

[1] Caspar's Wochenschr. f. ges. Heilkunde, 1841.
[2] Arch. f. Kinderheilkunde, 1868, Bd. 44, S. 4 u. 5.
[3] Gaz. d. Hôp., 1881, Nos. 124–126. Ann. d. Dermat., 1882, 2.

vigny) describes the bacteria of acute pemphigus as a row of links, 2.5 μ in length, arranged in the form of a rosary, the threads consisting of two to twenty links, being 4 to 40 μ in length. The individual bacteria and the threads are very mobile; he also found bacteria arranged in zooglœa form. The bacteria are found in the fresh vesicles and in the urine.

On account of the repeated occurrence of pemphigus neonatorum in the practice of a midwife who bathed the children in too hot water, Bohn looks upon cutaneous irritants as the cause of the disease.

The infectious character[1] of pemphigus is also shown by the fact that adults, coming in contact with the affected children, do not escape, although the general condition is not affected seriously. In older children and adults, the disease may give rise to the clinical appearances of contagious impetigo, and there is no doubt that a number of cases of impetigo contagiosa are really localized contagious pemphigus.

The same contagious property of the secretion, especially the pus, has been demonstrated experimentally in many other pustular eruptions (eczema, scabies, etc.).

Acute pemphigus of adults is rarer than the acute contagious pemphigus of children. Vesicles from the size of a pea to a hazel-nut, usually upon somewhat elevated, reddened patches, develop either with or without a febrile prodromal stage and general disturbances. The vesicles are filled at first with a clear, watery fluid, which becomes more or less purulent after a while. Beginning upon the trunk and limbs, the eruption spreads over the entire body. The buccal mucous membrane is often affected; without distinct formation of a vesicle, the epithelial covering of the mucous membrane is removed, and the latter often looks red, though it may be changed into a grayish-white, diphtheria-like, readily bleeding surface. If the wall of the vesicle is removed, the corium sometimes appears as a smooth, reddened surface, sometimes, particularly when the vesicles are very large, it is uneven and granular; a deeper loss of substance is observed only exceptionally. If the vesicular contents dry into crusts, their color will be light or dark, according to their previous contents. The consistence of the vesicles also varies, sometimes they are tense, sometimes flaccid.

The course of the disease varies as greatly as its duration. It does not always terminate in a few weeks in recovery; even in adults, the occasionally high fever produces severe symptoms, even a fatal termination.

Acute pemphigus has been observed a number of times in pregnant women, in some cases accompanying the various pregnancies, and thus constituting a natural transition to herpes graviditatis (Bulkley); also shortly after delivery. It has been observed also in drinkers, a fatal termination occurring rapidly, attended with delirium.

Chronic pemphigus varies considerably in its duration and course. There are cases in which the eruption occurs from time to time for months, so that at no time is the body entirely free. In other cases, long intervals elapse between the relapses. The disease may be benign or malignant; the more frequent the relapses, the greater the extent of surface occupied by the vesicles, and therefore of the secreting surfaces; the greater the danger of septic infection from the extent of the integument which has been laid bare, the more markedly the mouth and pharynx are implicated—the more unfavorable will be the course of the affection with regard to the life of the individual.

Chronic pemphigus begins frequently under the form of a polymorphous erythema,

[1] Ballard (Med. Times and Gazette, 1871, i.) reports a case of the communication of pemphigus from a cow to a human being. Gibier states that the disease occurs in asses, horses, sheep, and oxen.

and retains this character for a number of weeks; then larger and smaller vesicles appear upon the formerly erythematous patches. In other cases, the vesicles develop upon a more or less reddened, occasionally normal integument. Their size is very variable, from that of a pea to such an extent that it hangs down like a flaccid bag filled with fluid, and as large as the hand. Even upon the buccal and pharyngeal mucous membrane, separation of the upper layers of the membrane occurs not infrequently; they become macerated very rapidly and, on account of the unfavorable localization of the affected parts, assume a diphtheria-like appearance, with marked swelling of the tongue, salivation, fœtor ex ore, difficulty in swallowing, etc. However, a cleaner appearance of the parts and new development of membrane ordinarily occur very rapidly. Kleinwaechter[1] has described vesicles and eroded patches in the vagina in chronic pemphigus.

Upon the skin, recovery with the formation of cicatrices rarely occurs, but the rete becomes covered with the normal layer of horny cells; a light to deep sepia-brown discoloration often remains at the site of the former vesicle. More rarely, very firm papillary (stalactite-like) proliferations develop gradually upon the thickened subcutaneous tissue of places in which vesicles have continued to develop. The sites of predilection of such hyperplasiæ are the integument in and around the axillæ, that of the genital and inguinal regions, and the dorsal surface of the foot.

Fever and more or less severe general symptoms not infrequently accompany the various eruptions, but quite frequently they afterwards subside. Pain is not very noticeable; the patients complain merely of burning, tension, and disagreeable traction, produced by the adherent bandages and clothing. A more serious symptom is the insomnia, since, apart from the fact that it is not infrequently a prodromal symptom of a new eruption of vesicles, it reduces the condition of the patient to a remarkable degree and often yields only to large doses of narcotics. The pruritus, which is extremely violent in some cases, is very annoying and intractable.

A. Cazenave has described a peculiar form of pemphigus which he calls foliaceus. At first we find a few, usually small flaccid vesicles, with purulent contents, which become more numerous after the lapse of months. After a short period, the vesicles discharge their contents; occasionally not even vesicles are formed, and the skin is raised up in larger or smaller shreds of a yellowish or grayish color, which roll in from the free side. A new-formation of vesicles and separation of the skin form under these scales or crusts, and the morbid products are thus collected into "rolled, dough-like" structures, and the patient looks as if the skin had become converted into shreds. Not infrequently, scarcely a healthy spot can be found in the entire body: here an eroded, somewhat moist or suppurating spot, the shape of which indicates the circular form of the previous vesicle, there accumulations of scales; here crusts, there numerous flaccid vesicles; entire regions of the skin look as if scalded, and adhere readily to the bed-covering; the hair of the scalp and beard falls out, the conjunctiva is injected, the lower lid often slightly ectropic. Emaciation sets in, the absorption of pus causes an occasional rise of temperature. At times there are symptoms on the part of the intestinal tract. Death closes the scene after a shorter or longer period.

The buccal and pharyngeal mucous membranes and the conjunctivæ do not remain unaffected by the formation of vesicles. When they develop on the epiglottis and mucous membrane of the larynx, the most threatening symptoms of suffocation may be produced.

[1] Prag. med. Wochenschr., Bd. iii., S. 6.