CHAPTER XI.

SYPHILIDES.

LESIONS of the skin may appear at any period in the course of syphilis, being among its earliest symptoms and not infrequently among its latest.

Syphilitic eruptions are caused by two distinct morbid processes, hyperæmia and cell infiltration, each of which is extremely chronic in its nature. The hyperæmic or erythematous syphilides present several varieties, and are peculiar to the early stages of syphilis, being very rarely seen later than two years after infection. While hyperæmia is the essential morbid process, we not infrequently find associated with it a certain degree of cell increase, sometimes so slight as to be inappreciable to the naked eye, and again so marked as to form well-defined patches or nodules. The infiltrating cells of the syphilitic dermal lesions are round, granular, nucleated bodies, averaging $\frac{1}{3000}$ of an inch in diameter, similar to the white blood-corpuscles in general appearance, and analogous to the cells of the initial lesion and of the later gummatous tumors of syphilis. The surprisingly numerous and varied appearances, resulting from these two simple processes, are modified and complicated by various subsequent changes.

As a general rule, the cell-infiltration is in proportion to the age of the syphilis. Thus, in the secondary period the superficial layers of the skin are involved, and papules are developed; while, at a later period, the infiltration being deeper and more extensive, tubercles are formed. In the former the changes take place chiefly in the papillary and Malpighian layers; in the latter the derma and the subcutaneous tissue are involved. A tubercle, therefore, is simply a papule of large size. Evidently there can be no distinct line of division between the two lesions, and we frequently meet with intermediate grades of infiltration, to which we may apply the term *papulo-tubercle*. Tubercles may, however, appear early in the course of syphilis, but are usually not seen until after the evolution of a general superficial eruption. A syphilitic pustule may be looked upon as a pus-producing papule, the secretion of pus generally being secondary to the formation of the papule. In some instances, however, the formation of pus seems to precede or to be coincident with the cell infiltration.

The occurrence of a vesicular syphilide is rare, and has indeed been denied by some authors. It is true that vesicles, similar to those of herpes and eczema, are not developed, but it is not uncommon to find minute collections of serum beneath the epidermis at the

apices of papules, especially those small conical papules which have a more acute character.

The existence of a true bullous syphilide in the acquired disease has also been doubted, but we are convinced that it is occasionally developed at a late period in cachectic subjects. The degree of cell infiltration at the base of bullæ is usually much less than in any other syphilitic eruption.

Thus we find in syphilis lesions of the integument which correspond to those of non-specific origin: erythemata, papules, pustules, vesicles, bullæ, and tubercles, but the syphilitic eruptions present certain peculiar features whose recognition is important.

In addition to the above-mentioned lesions are the syphilitic *gummata* or *gummatous tumors*. These result from cell infiltration in the subdermal tissue, either limited to this region or involving secondarily the entire thickness of the skin, which may be destroyed, thus forming gummatous ulcers.

A syphilitic eruption may be composed exclusively of one or another of these lesions, or several may be simultaneously developed.

Much confusion has followed the application to syphilitic skin lesions of the classification of non-specific eruptions instituted by Wilan, who placed lichen among the papular, impetigo among the pustular, eczema among the vesicular, and psoriasis among the scaly affections. Such a nomenclature in syphilis is far from being as useful as might be expected. For instance, a papular syphilide, in its early stage, would be called lichen; but suppose it to be capped with pus, as frequently happens, and the name impetigo must be substituted, or we must designate it by the term pustulating syphilitic lichen. Should the lesion lose its pustular feature, and, becoming chronic, assume a scaly character, no term now in use could express the exact condition, and we should be compelled to add the term psoriasis.

Another objectionable feature in the nomenclature of syphilitic dermal lesions, is the use of the word lupus in describing certain tubercular syphilitic lesions whose features and course resemble those of the non-specific affections.

We have, therefore, thought best to apply the qualifying adjectives, erythematous, papular, pustular, etc., to the generic term syphilide, using the words ulcerating, serpiginous, etc., in addition, as the peculiar features of an eruption, in exceptional cases, may require. We thus avoid the erroneous inference that many of the chief varieties of simple skin affections are caused by syphilis.

Although we may use the word scaling in describing certain syphilides, it must be remembered that desquamation does not constitute the lesion, but that the latter consists of infiltrations into the skin, in the form of papular or tubercular eruptions, exfoliation of the epidermis being secondary. In some cases the dermal irritation is so excessive that desquamation continues long after the original lesion

has faded. It must then be considered merely a sequel of the specific process.

Besides the classification of syphilides, in accordance with their elementary lesions, we have one based on the recognized fact that each symptom has a favorite period of development. A strict chronological order is not followed, for a tubercular rash may be met with at an early date, or a papular eruption may be developed very late in the course of syphilis. Some French authors call the early eruptions precocious syphilides (*syphilides précoces*), and limit them to the first eight months of the disease; those of later appearance they term intermediary (*intermédiaires*), which may appear as late as the second year; while the very latest are called tardy (*tardives*), which may appear at any time before the tenth or the twentieth year.

A division which is simpler and more practical, and which we shall employ, is that which places erythematous, papular, pustular, and vesicular syphilides among *secondary* lesions, and tubercular, bullous, ulcerative, and gummatous among *tertiary* lesions. Certain peculiarities are presented by these two classes of lesions.

The early lesions of the secondary stage are distributed symmetrically and generally over the body, involving the superficial layers of the skin; the later lesions of this stage, although extensively and symmetrically spread, are less copious, and show a tendency to localization, and, moreover, invade deeper portions of the skin. The lesions of the tertiary stage are always profound, and are less profusely distributed, but they involve more extensive portions of particular regions for which they seem to have a predilection, and they are frequently unsymmetrical. The course of the tertiary lesions is decidedly more prolonged and indolent than that of the secondary.

Much difficulty is experienced in the study of specific skin affections in consequence of numerous modifications which they are prone to undergo. Familiarity with the features of the simple eruptions is essential to an accurate knowledge of syphilitic eruptions. Let us now consider some of the characteristics by which the latter may be recognized.

Their course, as compared with that of simple eruptions, is marked by chronicity and absence of inflammatory features. They may be accompanied by a moderate degree of systemic reaction. In some erythematous and papular syphilides of the early period of syphilis, the intensity of this reaction and the active character of the eruption may render the diagnosis from one of the simple exanthems very difficult. The actual nature of the eruption is demonstrated by its quickly assuming a subacute course. With the progress of the syphilis the tendency of the eruptions to present a chronic, apyretic character is more marked. Some local exciting cause may usually be found for the hyperæmia and inflammation sometimes attending tubercular, ulcerative, and gummatous syphilides.

Absence of Itching and Pain.—Owing to their indolent nature syphilitic eruptions do not, as a rule, cause any irritation of the skin.

Itching may be present in connection with an early eruption, whose evolution is particularly acute. It is never so intense as in a simple eruption, and is much more ephemeral. It is perhaps more troublesome with an eruption occurring on the scalp than elsewhere, and, when complicating an early rash, it is generally limited to the extremities, the upper more often than the lower.

Too much reliance must not be placed on the statement of a patient that an eruption itches. We must remember that the irritation may be caused by pediculi, or by the wearing of flannel, and that some persons have an excessively irritable skin.

Pain is even rarer than itching in syphilitic dermal lesions. A few instances have been recorded of its occurring in connection with a tubercular or a gummatous syphilide.

Polymorphism.—The simultaneous occurrence of several varieties of lesions in the same eruption is an important and common feature of syphilis. It is due to three causes: the chronic course of syphilides, their relapsing tendency, and the changes occurring in the lesions. A similar feature may be observed in some of the simple eruptions, as eczema, acne, and scabies, but in their case the diversity evidently consists of modifications of the original lesion, while in specific eruptions it is in part due to the development of new forms of eruption before the disappearance of preceding ones. Polymorphism is most frequently observed early in the secondary stage, since eruptions are then more numerous; yet it may exist even with the late tubercular eruptions.

Color and Pigmentation.—It is important to distinguish the color of the syphilides from the pigmentation which frequently follows them.

Their usual tint is pinkish-red, being much more subdued than that of simple eruptions. Even in exceptional cases of acute invasion, in which the color may be unusually bright, it is less intense than in the simple exanthemata. The hue soon fades to a brownish, which, after involution of the eruption, changes to a copper-colored, yellowish-brown maculation. Pressure dissipates the color during the early stages of an eruption, but finally the pigmentation, which has been compared to "the lean of ham," to the color of copper, and to a combination of yellow and brown, becomes permanent.

These pigmentary changes are not peculiar to syphilis, being equally well marked in lichen planus, and in cases of protracted dermatitis. They are probably due to deposit of coloring matter of the blood in the affected spots.

In persons whose circulation is feeble the color of the pigmentation may be light yellow, and in cases where the hyperæmia is slight and of short duration, no pigmentation at all may be induced.

It is claimed by some authors that syphilis may produce a primary pigmentation, independently of any preceding pathological process.

This condition is to be described in the section entitled "*Pigmentary syphilide.*"

Tendency to Assume a Circular Form.—The early eruptions are generally distributed over the surface without definite order, except in some instances in particular regions, where they may be arranged in a circular manner. This peculiarity is more commonly seen in the case of small papular rashes and in the erythematous syphilide. The latter often relapses in the shape of distinctly marked rings, differing from the papular syphilide, in which the bases of the papules generally merge together and form simply wavy lines, or segments of circles, or perhaps complete circles. In certain large papules, and in some papulo-tubercles, involution begins at their centres, leaving the periphery in a ringed form. A similar process may be observed in psoriasis, but in the latter extension of the patch may take place, which is usually not the case in syphilis. Ulcers of the later stages of syphilis may likewise exhibit this tendency. Many other, though less constant, features of syphilitic eruptions will be considered when describing individual lesions.

Influence of Mercury.—By many mercury is considered so infallibly curative of syphilitic eruptions that it is termed the "touchstone" in their diagnosis. Its influence is certainly wonderful in most cases, especially in early lesions and in those of an infiltrative character; but certain ulcerative and chronic forms, particularly those attended by much scaliness, are often quite rebellious.

In general, mercury is very efficient in uncomplicated cases, but in those complicated by other morbid changes, and especially in those which have had a long existence, its effect is much less pronounced.

The Influence of Intercurrent Diseases on the Course of Syphilides.—The course of syphilitic eruptions is not infrequently interrupted or even permanently arrested by some acute disease. Numerous instances have been reported of the disappearance of an eruption at the outset of an inflammatory affection of the lungs, of acute articular rheumatism, of various adynamic fevers, and of acute cerebral disease. Jullien mentions the remarkable case of a young man who was vainly treated by Diday for lingual mucous patches and a scaling palmar syphilide, who was finally cured during a general eruption of furuncles.

Variola and varioloid have been known to have a similar effect. It was once claimed that syphilis could be cured by vaccination, but careful trial of this means has proved its uselessness.

Our knowledge of the influence of erysipelas on the course of syphilitic eruptions is derived chiefly from the French.[1] Not only

[1] The most complete brochure on this subject is that of the celebrated syphilographer, Mauriac (Étude clinique sur l'influence curative de l'érysipèle dans la syphilis); and more recently an important case has been reported by Deahna (Vrtljschr. f. Dermat, B. iii., 1876, p. 57).

superficial lesions, such as papules, mucous patches, and condylomata, but deep and diffuse tubercles and even active ulcerations are affected; not only lesions within the actual range of the erysipelatous process, but even those at a distance are influenced by it in some obscure way, even after the failure of well-directed treatment. When, however, the syphilitic diathesis has a malignant character, erysipelas is likely to be a fatal complication.

That traumatic as well as idiopathic erysipelas may have a curative effect was proved in a case reported by Mauriac, in which well-marked syphilitic lesions were dissipated by an attack of the disease which followed their excessive cauterization. The practical value of this fact is limited by our inability to excite and control an erysipelatous inflammation.

Intercurrent diseases have no influence upon the syphilitic diathesis, and therefore no power to prevent relapses.

Unusual Modes of Evolution.—The appearance of a general eruption is looked upon as the indication of constitutional infection, but the first eruption may be limited, and a general rash may not be developed for several weeks. In some cases only two or three dermal lesions can be found at the usual date of invasion. Should the eruption be erythematous, the spots soon become coppery, and remain in a chronic condition; if papular, the papules are sluggish, and usually leave a pigmented spot. In connection with these scanty lesions, the patient may suffer from syphilitic pains in the head, in the bones, etc., and perhaps may have erythema of the fauces and high temperature. Within two to six weeks the usual general eruption follows.

The Localization of the Syphilides.—Syphilitic eruptions are often found in regions where simple skin lesions are seldom or never developed.

Secondary eruptions appear on the scalp and especially at its margin on the forehead, at the angles of the mouth, on the alæ of the nose, about the anus and upon the genitals, near the umbilicus, in the inguinal fold, between the toes, and upon the palms and soles. The supra- and infra-clavicular and sternal regions, where simple and parasitic eruptions are often found, are rarely the seat of specific exanthems, and on the dorsum of the hands the latter are not often seen. Regions rich in sebaceous and hair follicles are, as a rule, less frequently invaded by simple than by specific eruptions. The annular forms of simple erythema may occur on any part of the body, while these forms of the erythematous and the papular syphilides are more likely to be limited to the neighborhood of joints, the anterior and inner surfaces of the extremities, and the gluteal regions.

The papular syphilides are prone to be developed on the palms and soles.

Later eruptions are generally seated upon the nose, the lips, and the scalp; they are found upon the scapular, sternal, and gluteal