

the casting off of those layers of epidermis in which the fungus has its seat. Bazin first elevated epilation, with simultaneous application of corrosive sublimate washes, to the dignity of a therapeutic method; for this purpose he employed tweezers and in a few days completely epilated the affected parts of the head, together with a larger, apparently still healthy marginal portion. The epilation was followed by washing with a one-half-per-cent solution of corrosive sublimate containing some alcohol; in other cases Bazin also used frictions with tar, or an ointment of crude carbonate of sodium and quicklime, of each two parts, to lard sixty parts; or rubbing with ointments containing mercury, especially turpeth mineral one part, to lard thirty parts. These ointments are rubbed in morning and evening; if the cutaneous irritation becomes too violent, application is made for some time of cataplasms of oil or of potato-meal. After about three or four weeks epilation is recommenced, and repeated at longer or shorter intervals, with subsequent use of the ointment until the cure is complete. At first the epilation is painful, but becomes less so with every succeeding procedure. In place of the sublimate or the painting with tar, we may also choose *ad libitum* among the disinfectant coal-tar derivatives which at the same time excite some slight inflammatory action of the skin, such as benzol, phenol, thymol, creasote, naphthol, salicyl, etc. Parasitocides are then only of value when they have at the same time an irritating action on the skin and thus hasten the casting off of the upper layers; of late, chrysarobin and pyrogallol acid have been superadded to the large number of agents named above. Croton oil induces too violent pustular inflammation of the skin to permit of its use. To rub in pure carbolic acid can hardly be recommended, owing to the symptoms of toxic absorption to which it may give rise, and to its great painfulness. The disease can be declared cured only after several repeated tests: after a variable length of treatment (mostly five to six months and more), the hairs are permitted to grow without any therapeutic interference, and from time to time during about six weeks the hair and scalp are carefully examined, in doubtful cases even with the microscope. If during this time there are formed neither scutula nor any red round scaly spots (herpetic stage), the treatment, or the danger of infection, is at an end.

Favus of the rest of the body is more rapidly and more easily cured than favus of the scalp. The scutula find little support in the efferent ducts for the lanugo hairs, emollient applications soon cause them to drop off, and the subsequent employment of frictions with tar, etc., prevent the re-formation of the fungus.

In favous onychomycosis, the most rapid and complete removal of the nail substance by mechanical or chemical means is the most appropriate practice. Either the nail is carefully filed or scraped off, or the corneous lamellæ are softened by repeated application of concentrated potash solution or protracted soap, soda, or potash finger baths, until healthy nail substance grows forward from the matrix. The effect of the so-called parasiticide ointments and solutions, if used alone, is generally but short-lived.

DERMATOMYCOSIS TRICHOPHYTINA.

Herpes circinatus and tonsurans, Sycosis parasitaria, Eczema marginatum, Kerion Celsi. Ringworm.

In accordance with its location and duration, the clinical picture of dermatomycosis trichophytina assumes a special type. On the body, on parts where there are only lanugo hairs, it begins as a small red spot, somewhat scaly in the centre, barely elevated, often

bearing extraordinary resemblance to squamous eczema; the border is not always quite round, and soon enlarges into a wider circle. This circle has quite a characteristic appearance; at its periphery it is composed of a series of the smallest vesicles, each surrounded by a delicate red areola; toward the centre the branny scales give to the skin a more dirty gray color. In some cases the vesicles form a partly imperfect ring, there being lacunæ in the latter by defective development, or there are merely curved rows of vesicles.

In other cases again, the vesicle formation is only indicated, constituting merely an insignificant, not translucent elevation of the epidermis. At times, there is no indication of vesicles, so that the differentiation from eczema squamosum is possible only by the microscope or by characteristic neighboring efflorescences. On the other hand, there occur here and there large uniform elevations of the corneous layer of the epidermis, the size of a five-cent nickel, beneath which a small quantity of sero-purulent fluid accumulates, that is, a formation of bullæ; this soon dries into a thin crust which looks as if glued on (one form of impetigo contagiosa, Tilbury Fox). Cases of this kind are not so rare as might perhaps appear. From the central bullæ the affection often extends as typical herpes circinatus; the bulla formation is observed chiefly in the face of children. The vesicular contents, at first bright, later somewhat yellowish, persist in all cases only a very short time, often but a few hours; they evaporate or dry up, the cover of the vesicle being very thin and the contents very small in amount.

When in the course of days or a few weeks the circle—at first from the size of a five-cent nickel up to that of a quarter dollar—spreads farther, while a number of circles or larger rings form either from multiple infection from the beginning or by auto-infection, there will finally be here and there a contact of adjoining rings. In this case there ensues at the point of contact of such curves a disappearance of the vesicles and obliteration of the sharp demarcation, and a uniform desquamating surface results. Where two or more such circles unite, the limits form peculiar festooned figures.

By the side of these circles bordered by vesicles (herpes circinatus, ringworm), we also frequently see round or oval, more or less elevated patches with steep margins. They are covered with a moderate quantity of dirty gray scales, projecting like spines, often of a very brawny feel; at times their centre is somewhat depressed, discolored light-brownish or yellowish, hardly desquamating at all. A peripheral red areola cannot always be demonstrated. Their size is very variable, just like the other form. Hebra distinguished it as herpes tonsurans squamosus. Isolated small patches, ranging in size from that of a five-cent nickel down to that of a three-cent piece, are covered with a coherent, silvery, thin scale; peripherally they are limited by a distinct, slightly elevated, red, variably wide border which gradually merges into the normal color of the skin.

Some of the rarest cases are those in which two concentric circles of vesicles are present, and recently Unna¹ has figured a case in which three concentric rings could be observed. I am indebted to Dr. Lesser, of Leipzig, for the photograph of a case with three concentric rings of vesicles. Only the forearms were affected. The affection had existed but a few weeks. Under the microscope Dr. Lesser found an extraordinary number of fungi, trichophyton Malmsten.

The fungous affection called by P. Manson² tinea imbricata is a variety of herpes

¹ Vierteljahrsschr. f. Dermat., 1880, Heft 2 and 3, p. 165.

² McCall Anderson, Edinb. Med. Journ., 1880, p. 205, after Chinese Imperial Customs Gazette, 1879.