

stance was infiltrated with calcareous salts. Beneath the zone which we have just studied the chondroplasts had disappeared, and in their place was to be found some embryo tissue associated with a few spindle-shaped cells and a few adipose cells, the latter surrounding a few small vessels. In some places there was a veritable ossification in the midst of the cartilage.

Paris.

ON A CASE OF IMPETIGO FIGURATA SIMULATING LUPUS.¹

By WILLIAM YEATS, M.D., &c.

THE following case of impetigo figurata of the cheek is noticeable in its being a good specimen of the chronic form of the affection, and specially because in several particulars it strongly resembled lupus, and, further, if an inference may be drawn from one case, this affection may readily be mistaken. This form of impetigo is not rare, and has been recognised since pustular diseases were defined and classified by Willan and Bateman. The disease is figured by Rayer² (*Impetigo de la Joue*), and also by Alibert³ (*Dartre Crustacée Flavescente*). And were these drawings before the reader, it would be *apropos* to place side by side with them a representative plate of lupus on the cheek by Balmano Squire;⁴ and although these drawings are not exactly like each other, yet the last bears quite as strong a resemblance to the case below as the first two. It may be noticed also that Rayer's plate of lupus non exedens on the cheek is very like Alibert's impetigo figurata, and not unlike his own plate of the latter.

The patient, a girl, aged thirteen, with a good family history, and appearing to have a fair constitution and good physique, with no marked special diathesis, has been the subject of this cutaneous affection for more than six years. The history of the case is briefly this:—The disease was first observed about the middle of the right cheek, in the form of a small, well-defined, circumscribed, thick crust. After a time the crust fell off, when the affected surface presented a dark-red, livid appearance. These appearances, —viz., crusts and red patches—repeated themselves in succession almost up to the present time; while the edges, after some years, gradually became thickened and elevated, and the disease insidiously extended itself further and further on the cheek. Before the skin affection broke out the patient suffered from keratitis, for which she has been more or less specially treated ever since, and on this account about two and a half years ago she was sent to a country suburb of Manchester. After remaining there over a year, the disease on the face became interrupted in its course, the crusts gradually and entirely disappeared, the redness vanished by degrees, and the edges became thinned and were lost in the adjoining skin, the result being that the skin of the affected part presented here and there a white, cicatricial appearance, like a burn. After she returned to Manchester the disease reappeared, with the formation of crusts, followed by red patches, and the edges again became indurated and elevated. As the condition of the eyes had become worse, she was admitted to the infirmary under Mr. Windsor, to be treated for chronic keratitis with perforating ulcerations. About six months ago the skin disease was subjected to special observation and treatment. The following were the objective appearances:—On the right cheek, occupying an irregularly squarish surface, was a large, circumscribed, well-defined patch; in some parts of its surface red and livid in colour; in others (and this is to be noted) there were white cicatricial-looking patches; the edges—viz., the whole of the superior and inferior, most of the outer, and part of the inner were thick, indurated, and much elevated, and the lower half of the surface was generally thickened. The negative signs were not unimportant,—there were no pustules, no crusts, and no tubercles. The subjective symptoms were *nil*. There was also a very small circular crust on the upper

and inner part of the nose opposite the inner angle of the eye, which had only broken out a week or two before the above appearances were noted.

While the case was closely observed for further manifestations or development, a number of tentative punctiform scarifications were made in the red patches after the manner of Volkmann and Dubina, when the skin was found to be firm, resisting, and tough, like natural skin, and not soft and easily penetrated. This proceeding was followed by an increase of inflammatory action, an eruption of *psudra*, and crusts all over the affected surface and edges. It was also observed that the spot opposite the inner angle of the eye, which had been untouched, began to enlarge, developing first well-marked pustules followed by crusts. Shortly afterwards two other patches appeared, one on the chin and one on the eyebrow, both on the same side of the face. These developed, on a red base, characteristic impetiginous pustules, followed by crusts, and corresponded quite to the patches on the cheek and nose. Under treatment, the crusts on these two patches (on chin and eyebrow) fell off in about fourteen days, leaving the skin slightly red, which has gradually resumed its natural appearance and consistence. I would here notice that in the history of the case, previous to six months ago, no mention is made of pustules. This does not imply that they were not present, but that, from their small and variable size, their infrequent eruption, and short duration, they were overlooked; for, on one occasion about three months ago, when a number of *psudra* were to be seen, the parent and patient only recognised the pustules when they were pointed out.

The treatment consisted in first detaching the crusts by emollient applications, followed by rubbing into the red patches underneath the ammonio-chloride of mercury ointment night and morning, at first of half strength, then after a time undiluted, and quinine was administered internally. Under this treatment the patient has improved much; there certainly has been no further extension of the disease; the edges have gradually shrunk to the level of the skin, the lower edge only remaining thick, though comparatively less; the red patches are paler; the white cicatricial-looking patches appear here and there, though they also seem less marked. The characteristic impetiginous pustules are developed, though only very occasionally, principally on the edges, and any crusts that form are now thin and lamellar. The case seems improved every week.

Before pointing out the interesting particulars of the case, I would very briefly mention the clinical and essential characters of impetigo and lupus.

Impetigo, according to most authors, is a non-contagious, non-hereditary disease of the skin, the most prominent symptoms being the presence of particular small pustules called *psudra*, clustered together so as to form patches, which quickly discharge their contents, and are followed by crusts, which on falling off leave, as a rule, the skin reddish, which after a time becomes natural in colour and texture, though in chronic cases hypertrophy, induration, or atrophy may result. The essential characters of the disease are these. There is a true inflammation of the papillary layer and corium, attended with lively proliferation of the cell elements of the skin, and giving rise to new products, especially pus.

Lupus, in the same way, may be characterised as a local, non-contagious, non-hereditary, and never congenital disease of the skin. The principal clinical characters are the development of tubercles, which remain as such, or form nodules which either remain or undergo involution by absorption or by ulceration attended with scabbing or crusts, and resulting in all cases of cure in a cicatricial or scarred appearance. It may be interrupted in its course, heal by cicatrices, and break out afresh again. The essential character consists in an absolutely new growth of cells or neoplasm, and, according to the majority of authors, the corium *in toto* is the seat of the disease.

The characters of the case which simulate lupus are the following:—1st. The long duration of the malady, and the great resistance which it offered to cure; for many things had been done for it since its outbreak. 2nd. The situation of the disease is also a favourite one of lupus. 3rd. The interruption to the disease—which, as stated above, occurred about eighteen months ago—and its reappearance after a considerable interval resemble much the course of lupus. 4th. The occurrence of cicatrices which were the result of the apparent cure, the reappearance of the disease on these cicatrices as well as about their circumference, and the per

¹ Read at the Manchester Medical Society, and the case was shown at the same time.

² Atlas to Rayer's Theoretical and Practical Treatise on the Diseases of the Skin. London 1835.

³ Description des Maladies de la Peau. Paris. 1806.

⁴ Photographs of Diseases of the Skin. London. 1866.

manency of the cicatrices, all resemble lupus; which, when it does heal, always does so by cicatrices, which often are reattacked with the disease. 5th. As the disease spread only at long intervals, during those intervals no pustules were either observed or developed, so that at these times, if the crusts were excluded, there was little clue to the pustular nature of the disease, and then it resembled lupus more than anything else. 6th. The strictly local nature of the disease. 7th. The subjective symptoms were *nil*; neither are heat, tingling, or pain common in lupus.

After stating its resemblance to lupus, it is necessary to mention the characters which distinguish it from lupus and characterise it as impetigo. 1st. The occasional presence of impetiginous pustules followed by thick scabs distinguish it from lupus, while the history of the corresponding patches on the chin and eyebrow which ran through a quick course of pustulation, incrustation, and red patches, resulting, under treatment, in the perfect restoration of the skin, is almost sufficient to characterise the case as impetigo as distinguished from lupus, which is not, as generally believed, attended by pustules. 2nd. The crusts were peculiar to impetigo, and, unlike those of lupus non exedens, which form of lupus the case resembled in other respects; they were more like the crusts of lupus exedens, but then there was no ulceration in the present case. 3rd. The consistence of the red patches of the disease was found by the tentative scarifications to be firm, tough, and resisting; while in lupus the affected tissues are soft and unresisting. 4th. There were no tubercles, which is the principal clinical feature of lupus. 5th. The happy result of recent treatment favours this view of the nature of the case.

This case, like many other chronic cases, could not be understood from a single examination, nor by any individual character, such as pustules, to which Erasmus Wilson attributes much diagnostic value; or crusts, which Balmanno Squire says are more important for diagnosis than the pustules which produce them; but only by a knowledge of its whole history, and all its natural characters taken together, and by observing it from time to time in its different stages of varying duration.

The white cicatricial appearances of which so much has been said might be attributed partly to the chronicity of the case, but principally I think to the habit the girl acquired, on some advice, of tearing off the crusts, which she had done for a long period. In regard to this point, Mons. A. Hardy⁵ states that amongst certain scrofulous children affected with impetigo of the face, when the crusts have been roughly torn off, or when the secretion has lasted a long time, and when the ulceration, ordinarily superficial, has been a little deeper, after the impetigo is cured some slight but conspicuous and persistent cicatrices may remain.

Regarding the indurated and elevated edges which were present, I believe they were accidental, and that they resulted from the continued inflammatory process and papillary hypertrophy. Some might say that these were the tubercular indurations of lupus, but though there are generally some swelling and induration there are seldom seen such elevations in lupus. There are but few cases of lupus recorded where mention is made of elevated edges, and—unless Squire's pustular lupus (to be afterwards mentioned) is an example of this—the only one I have met with is reported by Sir W. W. Gull in vol. ii. of the *Medical Times and Gazette* for 1866, where it is stated that "the centre was slightly ulcerated, and the periphery vascular, raised, and spongy." Further, were these elevations composed of lupus tubercles and granulation tissue, the resulting surface would be cicatricial, whilst in this case the cicatrices are only to be seen here and there on the surface, and certainly not seen on the sites of the recently thick and elevated edges.

Seeing that some weight was attached to the presence of pustules as one of the distinguishing features of impetigo, and to their absence in lupus, I cannot but mention that Balmanno Squire, in his *Manual*⁶ and *Atlas*, gives a variety of lupus called pustular lupus. The characters of Squire's pustular lupus are these:—1. Raised livid patches. 2. Minute pustules. 3. Yellowish or dark-brown crusts; and on the crusts being detached there is seen a ragged shallow ulcer, covered with pink, flabby granulations. 4. Spreads by extension of livid elevations and fresh pustules, which, when they finally drop off, leave a cicatrix. All that I

would say of this species is simply that it is very like the above case, barring the ulcerations, which, by the by, might and do sometimes occur in impetigo. Yet, though supuration and pus are common enough in some of the stages of lupus, pustules are not; and if this form of pustular lupus of Balmanno Squire's, with such pustules, be admitted, it is easy to understand how the surgeon might hesitate to classify such cases as that detailed under impetigo, and would readily dub them the lupus which they simulate.

I would only further add that two great authorities have thought it worth while to point out the differences between impetigo figurata and lupus, though I question whether these can be of much practical value. The one is Rayer, who says "that the scabs of impetigo are yellow, prominent, and rugous, and slightly connected, especially on the face, and very different from the thick, brown, and adherent scabs of lupus exedens, which terminate in ulceration and cicatrization." The other Balmanno Squire, who mentions that impetigo figurata may be mistaken among other things for pustular lupus, and that it may be distinguished from the latter by the absence of deep ulceration and of subsequent cicatrices.

Manchester.

THE DOSE OF HYOSCYAMINE.

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THE attention of the profession has lately been directed from several quarters to the efficacy of the alkaloid or active principle of hyoscyamus in the treatment of various forms of nervous disorder, principally the spasmodic or convulsive, and also in mania. There is no doubt we have in hyoscyamine a potent remedy in concentrated form, in striking contrast to the bulky, uncertain, and often inert preparations of hyoscyamus. Hyoscamine seems to be a nervous sedative of the highest order, acting secondarily as a hypnotic, and in some of its immediate physiological effects closely resembling atropine. My object on this occasion is not to discuss the morbid states in which hyoscyamine is indicated, but mainly to call attention to the necessity for caution in connexion with the dose of hyoscyamine which can be used with safety, as illustrated by a case in which I have just employed this drug. As stated in your issue of the 13th inst. by your correspondent, Dr. Percival, doses of one-sixth of a grain had been used with success by Dr. Oulmont in a case of tetanus, while he himself, acting on the experience of Dr. Robert Lawson in a case of violent mania, administered a draught containing *one grain* to a young girl suffering from hysterical convulsions. From my own experience I should say the drug could not have been pure. It is as well the profession should know as soon as possible that very alarming symptoms may be developed under the influence of even *half a grain*, and hence the necessity of giving smaller and repeated quantities rather than one large dose, the effects of which might be serious, if not beyond control. That this caution is not unnecessary is proved by my own very recent experience in a case of what I may term climacteric mania, which I shall very briefly state.

A. H—, an unmarried American lady, in her forty-seventh year, has for the past eighteen months been suffering from mania, with frequent acute exacerbations, apparently dating from the sudden suppression of the menses under the influence of a fright. She is of typically nervous temperament, and previous to the disturbance of her mental equilibrium had been most gentle in manner, affectionate in disposition, and highly artistic in tastes and accomplishments. She was sent to the Isle of Wight, in hopes that the change might do good, but without effect, and she was some weeks ago placed under my care here. Her condition was not encouraging. The pulse was never under 90, the temperature rarely below 100°, the pupils contracted, great difficulty in nutrition and medication, and, except when sleeping under the influence of sedatives, there was constant restlessness, incoherence, and violence. As every recognised remedy and mode of treatment had been tried in succession, I resolved to try hyoscyamine. I prescribed half a grain in solution, which was taken at 10 P.M. on Friday, the 19th inst. At 2 A.M. next morning (Saturday) I was sent for in

⁵ In the article "Impetigo," in the 18th volume of the *Nouveau Dictionnaire de Médecine et de Chirurgie Pratiques*, page 437.

⁶ *Manual of the Diseases of the Skin* (London, 1868).