Illustrations

OF

HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. MARY'S HOSPITAL.

PRACTICAL REMARKS ON THE PATHOLOGY AND TREATMENT OF SKIN-DISEASES.

By C. HANDFIELD JONES, M.B., F.R.S., Physician to the Hospital.

[Continued from page 201.]

Lupus. This malady presents several interesting points for consideration. It is certainly a skin-disease, yet it seems to form a connecting link between some of the ordinary eruptions and the graver and malignant affections. In several respects it approaches to syphilis, which, indeed, may be the actual cause of one form of it. Its soft, low, languidly inflamed tubercles are by no means unlike those of secondary syphilis; and its frightful ulcerations are only paralleled by those of phagedenic chancre. Yet, on the other hand, it differs widely from it in its essential relation to the skin, and its non-dependence on any communicated virus. Though often affecting persons of scrofulous constitution, it is unquestionable, as Cazenave states, that in a great number of cases it shows itself in persons in the prime of life, robust, and having always enjoyed excellent health. No previous disease of the skin seems to have any determining influence. There is no doubt that the three forms of lupus, the exedens, superficial, and hypertrophic, which are justly distinguished, are mere varieties of the same affection, as they may all exist at the same time in the same individual, and all cause more or less structural alteration of the skin.

The origin of lupus is just as obscure as that of a fatty, a fibrous, or any other tumour. We have no ground whatever, that I can see, to suppose that it depends on a poison in the blood. The phenomena are more favourable to the view that it is a dynamic derangement of the nutrition of the skin, which issues either in a languid chronic inflammation, or in a continually advancing ulceration. The absence of affection of distant parts, the non-impairment of the general health, and the good effect of a local treatment in many cases, are weighty arguments for regarding the disease as a local degeneration, or disorder of nutrition, depending, in all probability, on failure of the vital power of the tissue itself.

If we compare the inflammations of lupus with those of psoriasis or other cutaneous eruptions, we must admit that the mere inflammation is not the essential thing, and that the peculiar tissue-change which ensues is of much more consequence. A patch of skin may be severely congested and inflamed even for a long time, and yet undergo no such alteration as lupus infallibly induces. The eroding tendency of lupus, which becomes the chief feature of the exedens variety, points clearly to a low vitality of the skin and other tissues. The power of repair is wanting; exudation, instead of organising into granulations and cicatrix structure, forms a glutinous discharge, which concretes into a lifeless scab. We see the same tendency in the perforating ulcers of the cornea and stomach, where a local decay and wasting of tissue occurs in one particular spot, though all around the living parts maintain their vitality and normal composition. Such instances are very illustrative of the independent vitality of each separate part, and how this may fail primarily and *per se*.

The view, then, which I take of lupus is, that it is typically a tissue-disease, not depending on external influences or on any *materies morbi* generated in the system, but on a primary failure and disorder of the nutrition of the skin itself. It has some unequivocal affinities with scrofulous caries of bone, scrofulous disease of the skin, tuberculous ulceration of the lungs; but in other respects differs from them materially. In particular, it is more purely a tissue-disease than they are, less under the influence of the general system, and more amenable to local treatment.

Mr. Hunt, on the authority of Mr. J. Hogg's examinations, regards lupus, whether exedens or superficial, as a disease of the sebaceous glands, which become disintegrated, discharge their contents in the cellular membrane, and set up irritation and ulceration, which become phagedenic in lupus exedens. If it be admitted that the sebaceous follicles are primarily affected, we have yet, it seems to me, no true explanation of the essential character of lupus. Why do not the sebaceous glands, which are inflamed in acne, cause the same changes which occur in lupus? Evidently we must go much further back for an explanation than the mere locality of the disorder; we must look to the peculiar condition of the vital actions.

We may strive with more or less success to stay the ravages of lupus exedens by cod-liver oil, iodide of iron, and alterative doses of calomel and opium, with the local application of biniodide of mercury, or arsenic and calomel pastes, or strong chloride of zinc solution (3j to spirit. 3j); but the morbid tendency is generally too strong to allow us to obtain more than very incomplete and temporary success. In one case, Mr. W. Cook seems to have achieved a cure by lemon-juice; but we must fear that a second patient would hardly be so fortunate. He seems to have regarded specially the scorbutic diathesis of his patient, and justly; but, in the great multitude of cases, there is none such discoverable. Mr. Hunt is confident as to the curability of the disease by arsenic persisted in for months or years. It is necessary to ascertain the maximum dose which the patient can take without injury, and to persevere with it steadily.

In superficial or hypertrophic lupus, repeated application of iodine paint appears to me the most beneficial means. It provokes considerable discharge, whereby the engorged vessels are unloaded, and a healthy stimulus is imparted to the diseased tissue. This effect is not at all peculiar to lupus. I have seen the same good results in various instances where there was great engorgement and swelling of the skin; as, for instance, in carbuncloid furuncles. Dr. Churchill speaks highly of the good effects of iodine painting in inflammation and hypertrophy of the cervix uteri. The application should not be made too frequently; one painting a week is mostly sufficient. The acid nitrate of mercury is also efficacious, but more painful. Bichloride of mercury (gr. x to 3j), or chloride of zinc solution (gr. v-x to 3j), as recommended by Veiel, may be used if the iodine seems to lose its power. Internally, it is worth while to give arsenic and cod-liver oil; but I do not think these or any other remedies are as effectual in controlling the disease as external applications.

The following case is worth recording.

J. N., aged 36, labourer, was admitted June 9th, 1860. He has suffered with his disease fourteen years. It commenced in one hand, and a surgeon amputated part of a finger on account of it. His face and both hands are now affected, the face all over. The disease is well-marked lupus, without the eroding tendency. The face is much swollen, very red, with tubercular formations here and there; the nostrils and ocular apertures are contracted; and the lips thickened and stiffened; the disease encroaches a little on the mucous surface. His aspect is nothing less than hideous. The backs of the

hands are covered in large patches by extremely thick scabs, which adhere to extraordinary papilloid prolongations of the cutis with remarkable firmness. He is unable to work by reason of his disease; in other respects, his health is fair. He was ordered a drachm of cod-liver oil three times a day, and one-twentieth of a grain of arsenious acid and half an ounce of water three times a day.

R. Iodinii 3j; potassii iodidi 3j; mastiches ʒij; tincturæ iodinii 3ij. M. Partibus affectis illinatur.

He attended very irregularly, as he lived at a great distance; but his wife reported, on August 6th, that his face was getting quite clear, and that he had gone to work. Considerable improvement was certainly effected.

Acne. Acne, by common consent, is acknowledged to be a chronic more or less severe inflammation of the sebaceous follicles and adjacent tissue. *Acne punctata* is distinguished by a black spot of dirt at the orifice of the follicle; *acne indurata*, by the greater amount of exudation and induration around the follicle; *acne rosacea*, by the predominance of venous congestion and hyperæmia in the skin for a considerable extent around. As to the actual cause of these conditions, we know not much. The rosaceous variety is often, according to Cazenave, dependent on gastro-intestinal irritation, or on hepatic disease. Exposure of the face to heat in the stooping posture, irregularities of diet, mental excitement, local irritants, even cold winds, are all admitted as causes in various instances. The extreme frequency of the eruption on the back, between the shoulders, where the skin is thick and not easily accessible, and the speedy amelioration procured by diligent washing and rubbing, go far to show that one important element of the disorder is a languid or torpid condition of the tissue. The hyperæmia of the indurate and rosaceous forms is almost always decidedly venous, often very remarkably so. The suppuration is apt to be of a languid, imperfect character. The accumulation of the secretion in the follicles shows that excretory action goes on very imperfectly, probably owing to the abnormal quality of the product. In some cases, this may be the result of the inflammation; in others, the converse may happen. All this indicates a torpor of the vital actions of the skin, eminently of its secretion and circulation. The fault appears to be a dynamic one; and there is no evidence that a *materies morbi* is in the least degree concerned in it. What is essentially wanted is to animate and invigorate the vitality of the integument, and to restore tone to flaccid and distended vessels. We must, therefore, endeavour to excite without irritating the skin, to promote secretion, to relieve congestion by the usual methods, and to administer tonics which may prevent its recurrence. Ointments of iodide of sulphur or ammoniochloride of mercury, lotions of bichloride of mercury, or liquor plumbi, vapour-baths, and douches, all stand us well in stead in many cases. The Turkish bath to many persons will be an agreeable and efficient remedy; but it is not to be used indiscriminately. I have tried the mineral acids more or less diluted, and Vlemminckx's liquid, as well as a lotion of sulphur and liquor potassæ, which has some repute; but I cannot report much of their efficacy. Light pencilling with moistened lunar caustic is decidedly more beneficial. Tonics, I believe, are often useful, especially where debility and loss of tone are more or less apparent. I am partial to a combination of strychnia and sulphate of iron, with a little sulphate of magnesia. In one very bad case of *acne rosacea*, bichloride of mercury internally appeared to have a decided effect in quickening the languid circulation, and restoring a natural warmth to the cold livid hands and nose.

CASE. F. P., aged 52, a wood-carver, was admitted on May 26th, having been ill one month. He complains of nervousness, and a bad taste in his mouth, with dis-

relish for food. The skin is cool; the pulse steady. He has pains between the shoulders. The tongue is whitly; bowels open; urine dark, thick, and hot. He has a very marked eruption of *acne tuberculata* on the forehead and face; the eruption consisting of large inflamed slowly suppurating tubercles. He had a similar eruption on the face two years ago, which extended all over the body. He was ordered to take, three times a day, one-twentieth of a grain of strychnia, fifteen grains of sulphate of magnesia, two grains of sulphate of iron, seven minims of dilute sulphuric acid, and ten minims of tincture of ginger in an ounce of water; and to apply lotion of bichloride of mercury to the skin, which was also pencilled over in the situation of the tubercles with solid nitrate of silver. Under this treatment he improved very much; so that, by July 28th, the face was all but quite natural, and this in spite of recent excess in drinking.

Less common Skin-Diseases. The following records of various less common skin-affections seem to me of some interest.

CASE I. E. J., aged 16, female, was admitted January 7th, suffering with amenorrhœa of some months duration, swelling of the legs and feet, and debility. She was treated with ammoniated tincture of iron, and aloes and myrrh pill, and improved decidedly; but, on February 8th, she complained that her feet perspired very much indeed, and smelt very bad. I regarded this as a cutaneous flux (the bad smell being the result of the secretion not being removed, and decomposing), and not as an eliminant effort. I prescribed, therefore, quinine and nux vomica to tone the vessels, and a strong lead lotion to act as an astringent to the relaxed skin of the feet. This plan agreed very well, and was continued for a month, when (March 8th) she showed me a spot of eczematoid character on the outer part of the right foot. For this she took three minims of liquor potassæ arsenitis three times a day, and used some ointment of zinc with nitric oxide of mercury continuing her quinine. By April 5th she was quite well. M. Gaffard has found the same kind of proceeding successful. (See *Edinburgh Medical Journal*, Jan. 1860.)

The above case is certainly suggestive, to say the least, of the possibility of the theory of eliminant actions being not invariably applicable. It may also be remarked that, in any really eliminative effort, it is highly probable that the excretion would take place at least usually by way of the natural channels, and not by the clumsy contrivance of an eruption. Nature does not bungle her work in such a way, we may be sure. Thus, if eczema were an eliminant action, may we not fairly argue that the *materies morbi* would be expelled by the sweat-glands, instead of breaking up and stripping off the epidermis to exude it from the papillary surface of the corium?

CASE II. D. S., aged 48, was admitted November 11th, having been ill five or six weeks with a copious eruption on the chin and both lips, extending as far as the angle of the mouth, occupying the middle of the lower and most of the upper lip. The skin has a very red, tuberculated aspect; some of the prominences are considerably elevated. The beard-hairs come out very easily; but, on a microscopic examination, they are found free from spores. His health is good. Pulse quick. He was ordered to apply a lotion consisting of one ounce of liquor plumbi diacetatis and five ounces of distilled water; and to take, three times a day, a draught containing seven grains of citrate of potash, five minims of solution of arsenite of potash, and three minims of tincture of opium, in an ounce of cassia water. On the 18th, the mixture was continued; and an ointment was prescribed, consisting of three drachms of ointment of nitrate of mercury and five drachms of spermaceti ointment. By January 20th, the elevations of the skin had subsided, and the disease had disappeared.

This was a well-marked instance of sycosis, evidently not of parasitic origin. M. Chaussit states that fungi are only accidentally present when they are met with.

CASE II. R. G., aged 3, female, was admitted January 15th. She had been ill fourteen days. She has a very marked eruption of vesicular character on the chin and lower lip, a spot also on each eyebrow. The eruption is extending towards the cheek; its base is inflamed and excoriated. Three out of six children have some eruption. The crusts contain multitudes of refractive corpuscles, much like sporules of favus, but yet also like small abortive nuclei. They do not form rows, or bud out. Bichloride of mercury does not alter them notably. She was ordered to apply an ointment containing one ounce of ointment of iodide of sulphur and fifteen grains of sulphur; and to take three times a day two drachms of a mixture containing six grains of iodide of potassium and a scruple of carbonate of soda in three ounces of compound infusion of gentian.

Feb. 2nd. She was much better. The medicine was continued; and she was ordered to take a drachm of cod-liver oil twice daily.

Feb. 16th. She was very much better; the eruption was nearly gone. The oil and ointment were continued; and half a drachm of wine of iron was ordered to be taken three times a day.

From the probably contagious character of this disorder, its general appearance, and the corpuscles found in the scabs, as well as from the results of treatment, I incline to consider it as an example of porrigo Startinii. On the whole, I do not regard the corpuscles found in the exudation as sporules; but they had certainly a good deal of resemblance to them, such as I have not observed in other exudations. Mr. Hutchinson on two occasions only out of many has found fungi in the scabs.

CASE IV. E. M., aged 8, male, was admitted February 12th. He had on the upper lip, towards the left side, a largish lobulated tumour, which, on being pressed, jumped out of the skin in which it lay. It appeared

part of the left eyebrow. These last look like minute whitish or translucent pinhead spots, elevated, with a small depression at the apex of each. There is a similar one at the back of the neck. On minute examination of the tumour which had started out of its bed, it was observed to be distinctly lobulated, with small blood-vessels ramifying over the groups of ultimate vesicles. These were rather larger than those of the pancreas, and had a distinct homogeneous and strong limitary membrane. Next to the homogeneous membrane is a layer of greyish semitranslucent aspect, enclosing a cavity filled with more opaque material. The former layer consists of epithelial cells containing granulous matter in their interior, the outer ones being ranged so as to present a vertical striation somewhat like columnar epithelium. The more opaque substance consists of highly refracting cells, about four to six 5000ths of an inch in diameter, having a well-marked envelope and oily-looking and granulous contents. These are manifestly formed inside the epithelial cells; they can be seen sometimes in their interior, and many empty husks of the latter are scattered about. It is quite evident that the fatty cells are true cells, and not mere masses of fatty degenerated matter. How they are produced is not very apparent—whether from the nuclei, which are not often visible; or as a separate development. (See Figure.) His health is not good; he is drooping. Appetite poor. He often complains of pain in the head.

March 30th. It is reported that a baby has two similar tumours; and fresh ones continue to form on the boy.

April 13th. The baby's tumours are very distinct; and there is a very suspicious one on the mother's breast, close to the nipple.

June 4th. Two children now have the same tumours, and the mother has several about the left nipple.

June 15th. The mother and three children came to the hospital to-day, all with the same tumours; one largish one is on the mother's left temple. They appear to be growing rather fast, and several of them show some surrounding inflammation.

July 20th. The tumours have now disappeared from all the affected persons, except from the mother's breast. The original patient has lately passed through an attack of measles; the other children have escaped. A lotion of bichloride of mercury was employed at first, and appeared to have the effect of shrivelling up some of the tumours, and causing them to become detached. Subsequently, it appeared to be inoperative, and I used the acid nitrate of mercury; but I am not sure that it was applied more than once.

On referring to the papers of Drs. Henderson and Paterson on Molluscum Contagiosum, in the *Edinburgh Medical and Surgical Journal* for 1841 (vol. lvi), I cannot but think that the case above recorded belongs to the same class. In particular, the drawing given by Dr. Paterson of the bust of a child affected with the tumours conveys exactly the idea I should wish to give of the appearances in my cases. Mr. E. Wilson is strongly opposed to the idea of there being anything contagious in this affection, and seems to refer it to the same class as the common comedones. It must be allowed, however, that its cell-growth is very unlike that of the latter; and that its general appearance and tendency to affect children are also distinctive. For my own part, I will not affirm that it is a contagious disorder, as there is not absolute proof; but I certainly think there is much reason to suspect that it is so. The affection is certainly a very rare one; the above is the only instance I have met with in many thousands of patients. I think I can be sure that mere squalor or uncleanness was not the cause of the peculiar disorder in my patients; nor does it appear to have been so in Dr. Paterson's.

Alopecia Areata. With regard to this affection I have but little to say, except that my observations quite coin-

Figure representing Tumour in Case iv. a Ultimate gland-structure. b Epithelial cells. c Fatty cells. d Fatty cells in epithelial cells. e Husks of epithelium.

nine months ago; the others, to be presently mentioned, very recently. One of them is near the chin on the left side, and three others are situated just below the inner

cide with those of Hutchinson and others as to the absence of any fungous growth about the hairs. The disease is an atrophy, *pur et simple*; and a very interesting example it certainly affords. It is remarkable how purely local the change is; all the other tissues may be in full vigour of nutrition and development, except the follicles in the affected patches. There the scalp becomes smooth, pale, thinned, and devoid of reactive vitality. In one well-marked case, croton-oil liniment, which I prescribed, produced considerable irritation of the hair-covered part of the scalp, but none on the bald patches. Von Bärensprung ascribes the atrophy to a paralysis of trophic nerves. I do not see any ground for this assumption, and prefer to regard it as a simple loss of nutrient power in a tissue—a true degeneration. Local stimulation is the only treatment that is of any avail, and this must be very long continued.

[To be continued.]

Original Communications.

EXTERNAL SQUINT; VARIETIES; OPERATIONS FOR INTERNAL AND EXTERNAL SQUINT.

BEING REMARKS IN THE COURSE OF CLINICAL INSTRUCTION AT THE CENTRAL LONDON OPHTHALMIC HOSPITAL.

By HAYNES WALTON, F.R.C.S., Surgeon to the Hospital, and to St. Mary's, Paddington.

[Continued from page 383.]

EXTERNAL squint is very much less frequent than internal, and very seldom appears before puberty, except in connection with a diseased brain; but is common in advanced age, at which period of life it is almost sure to be induced by loss of vision from any cause. It is a fact difficult to be explained, that at the adult age, the same circumstances shall at different times excite either kind of squint. An eye is rendered useless from a blow, or disease, and it may become misdirected to either side.

The varieties of external squint are few and easily recognised. As the first, I give disease of the motor oculi, or third cerebral nerve, whereby the muscles that turn the eye inwards are paralysed, and eversion follows. There are degrees of this paralysis. There is impairment of sight, due to the loss of the adjusting power of the eye, through the influence of the ciliary muscle and the recti, and also to the state of the pupil, when much dilated. This is a common effect. But there may be confusion of vision from the loss of parallelism only. Ptosis is an usual accompaniment. Recovery from the paralysis is often frequent and perfect, so that only after it has been proved to be permanent, should an operation be undertaken; and, although the prognosis is very discouraging, practical surgery is not to be rejected, and may often be beneficially applied. The success will be according to the tonic contraction of the external rectus, and the failure according to the persistence of the paralysis. It is impossible always to distinguish beforehand between the preponderance of the one or the other of these. A speculative attempt, therefore, at amelioration is justifiable.

The second form is more common, and is very similar to the second form of internal squint. The eye can be brought to the centre of the orbit by a strong effort. It may even sometimes be inverted. The best result from an operation is to be gained here. For years have I taught that, if the eye could be brought to the centre of the orbit, and kept there for a few seconds, the operation may be undertaken with the fullest assurance of success.

The third, the commonest variety, is the double squint.

It would seem to be that into which the single squint has a tendency to pass. Except produced by paralysis, it rarely commences as a double affection, and in this it strikingly differs from internal squint, in which the double affection from the commencement is common. In the marked cases, the mutual convergence is striking. In the lesser degree there is rather a deceptive appearance, the deformity seeming to alternate, but implication of the two can generally be made out. Taken separately, either may be brought to the centre of the orbit, and even more or less inverted, but they cannot be made to converge, nor yet to assume a parallel position.

The double operation is requisite in all degrees of the double deformity; and, in unequivocal abduction of both eyes, the operating may be done at once and before the effects of the chloroform have passed away, if this drug have been used. If doubt exist, there should be a careful inspection before the second eye is touched.

The operations for squint in general may be classed into those executed with the knife, and those with the blunt hook and scissors. The first have been executed in three methods, and with instruments of dissimilar fashion; I think that all of them are objectionable. The second embraces two plans: that of cutting through the conjunctiva, over where the muscle is to be divided; and the so-called subconjunctival proceeding. I advocate the former of the second class, with modifications of my own, and I use sutures, because I find it the most sure; the easiest in execution; the least detrimental; the most generally applicable; and as I fully believe, that which gives the best results, and leaves the least trace of performance.

First, as regards the operation for internal squint, I hold it to be preferable to sever the muscle close to its attachment, and therefore internal to the "ocular tunic," because it is attended with the least disturbance to the surrounding parts, and it secures the new attachment of the muscle to the eyeball, not far back from the natural one. I advise you to make yourself acquainted with the anatomy of the "ocular tunic". Its discovery is among the latest of anatomical novelties: as yet it has not found a place in works on anatomy. I have given a full description of it, with an illustration, in my work *On the Surgical Diseases of the Eye*.

The eyelids are best retracted with the spring tunic-retractor. Should the eye not be sufficiently straight for commencing, I draw it to the required position with a pair of forceps applied to the outside. Taking up a fold of the conjunctiva horizontally, I cut it through vertically opposite the lower edge of the muscle, which generally corresponds to the inferior edge of the pupil, to about a couple of lines, and then incise the subconjunctival tissue to an equal extent. The latter is sometimes divided along with the conjunctiva, but it may be thick and very dense, and need special attention; and it can never be certain that the division is effected, except the sclerotica be exposed. I now introduce the hook, secure the muscle, make it prominent, and, if the upper part be covered by the conjunctiva, as in all probability it will be, I push this off with the forceps, while I make the hook-point more prominent, and, keeping the muscle very tense, divide its tendinous expansion between the hook and the eyeball with the blunt-pointed scissors. I would rather advise a beginner to incise the conjunctiva more freely, as he will thereby take up the muscle the more readily, and there can be no particular objection against the extended incision. At any rate, scarcely more need be cut through than actually covers the muscle. The hook should always be passed a second time, to ascertain whether the operation has been completed. Besides muscular tissue, portions of condensed areolar tissue might escape division in the first instance.

It is a very common error to attempt to secure the muscle before cutting through the subconjunctival tissue.