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PEDICULI VESTIMENTORUM.

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IN spite of the veil of obscurity that has been thrown around the whole subject of cutaneous disease by theoretical writers and teachers, there is no branch of medical science that offers so clear and fair a page to the observer, if he only knows how to read it; but to be able to do so he must have studied his alphabet at the bedside and not in elaborate treatises. The effects produced on the skin by parasites and vermin constitute quite a large proportion of the cutaneous diseases, especially in those countries where the poorer classes live in great destitution and misery, as, for example, in the East; and undoubtedly many of the wonderful cases of diseases of the skin that are described as being common in eastern countries are due entirely to these causes.

One of the most common species of vermin that infests man is the *pediculus corporis*, or body louse. With us, where luckily even the poorest people are comparatively clean in their habits, it is not very frequently met with; but any one who served in our past war probably had an opportunity of becoming acquainted with the insect. Its presence is, however, often overlooked, as it is *never* found on the skin, but always on the clothes; so that a person may be almost eaten up by these vermin, and yet on stripping not one will be seen on him. When the clothes are taken off they crawl into the folds and under the seams, and unless one knows where to look for them even the clothes may be examined without effect. Hebra, who has opportunities in his wards of observing an immense number of such cases, insists very strongly on this fact, and on this account rejects the name of *pediculus corporis* and substitutes that of *pediculi vestimentorum*. Although they resemble in general appearance the *pediculi capitis*, they are distinct species, and never mingle with each other.

It has been noticed for a long time that persons who were infested

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with these vermin were also afflicted with various eruptions and disorders of the skin, and by that only too common process of putting the cart before the horse, the lice were supposed to be caused by the diseased condition of the skin. Some authorities even claimed that the vermin were spontaneously generated in the unhealthy skin; others were content with the supposition that they were particularly fond of diseased persons, and found on them a congenial habitation. This peculiar disease was called phthiriasis. The truth of the matter is, that the lice are the cause of the cutaneous disorder and not the effect.

The appearances produced on the skin by the presence of these vermin have been described under the name of prurigo pedicularis; they are many, and there would be a great opportunity for one wishing to cover many pages, to give a minute and elaborate description of the different varieties, beginning with prurigo pedicularis papulosa or lichenodes, and going through prurigo pedicularis, eczematodes, impetiginodes, ecthymaformis, furunculosa, phlegmonodes, up to gangrenosa, and perhaps dividing each of these seven varieties into four subdivisions, as they happened to be found on a patient who was, or was thought to be, a victim of the scrofulous, syphilitic, herpetic, or arthritic diathesis.

The only manifestation on the skin which is directly caused by the louse, is a small red papule which appears immediately after the bite, and which itches very violently. If this is not scratched, it gradually loses its redness, and in the course of from twelve to twenty-four hours has disappeared entirely; if, however, the desire to scratch is not withstood, the hyperæmia and irritation last longer. All the various eruptions that are observed on the skin of persons infested with lice, except the small papules already mentioned, are caused by scratching; and no one who has not seen such cases can conceive how such patients tear themselves to pieces. It is not uncommon to see excoriations several inches in length, where the finger nail has dug down into the deep layers of the epidermis. The result of this continual irritation of the skin is an artificial eczema; pustules are formed where the skin is deeply wounded, circumscribed phlegmonous inflammation (furuncles) takes place, and in old cases certain parts of the skin are one mass of crusts, scabs and boils, with long excoriations covered with dried blood, where the nails have literally ploughed through the epidermis. As these insects never leave the clothes, it follows that those parts of the person that are uncovered, as the face, hands, and in poor persons the feet, will not be affected. Moreover, there are certain regions of the body that are more exposed to their bites than others, namely, those parts where the clothes are in closest proximity to the skin, such as the nape of the neck and shoulders, where the shirt lies in actual contact with the skin, and also the waist and loins. It is on these parts that we always see the greatest amount of disease. There is one

other very important characteristic of such a skin, and that is the pigmentation that takes place, some patients turning almost black. This is due to an increased amount of pigment in the rete mucosum, and is probably caused by the hyperæmic condition of the skin produced by the itching and scratching. We see many instances of chronic hyperæmia of the skin which are followed by pigmentation, as the dark patch which remains after a blister, the brown spots that remain after the disappearance of a chronic eruption, or more commonly still, the tanned appearance of the face after being exposed to the rays of the sun.

Often, round dark spots will be seen, of various sizes, with a white spot in the centre; these are the remains of furuncles, the dark periphery showing where the hyperæmic base was, and the white spot being new cicatricial tissue formed by the healing of the cavity left after the discharge of pus.

The general appearance, then, of a patient infested with lice may be summed up as follows. Evident marks of violent scratching on different parts of the body, especially on the shoulders and loins; various lesions of the skin in the same regions, from a papule up to large furuncles, and an irregular pigmentation of the skin, with some spots of a dark brown. With regard to the diagnosis, there can be no doubt when the lice are found; but as the patient may be seen after he has put on clean clothes, or may come in to a hospital for some other disease and have been put into a clean bed, it is important not to be dependent on the actual presence of the louse for the diagnosis.

As the manifestations of *prurigo pedicularis* on the skin are due to scratching, any trouble which causes violent itching must call forth similar appearances. Of the eruptions which are accompanied with violent itching, some, as *eczema* and *herpes tonsurans*, are so well marked in their characteristic lesions of the skin as to render the confounding them with *prurigo pedicularis* impossible; with others, on the other hand, the mistake might be more easily made. Such are *pruritus*, true *prurigo*, and *scabies*. In these the gross manifestations on the skin are due to the same cause as those of *prurigo pedicularis*, i. e., the finger nails. Luckily, however, we have a means of diagnosis in the different distribution of the cutaneous manifestations. Under the head of *pruritus*, Hebra describes those cases which consist in a violent itching without any visible lesion. It mostly occurs in old persons; hence by some writers it is called *pruritus senilis*. In some cases the irritation is very severe and the patients scratch themselves terribly, but the marks of scratching are impartially distributed over the whole body; whereas, as we have seen in *prurigo pedicularis*, they are much more marked on the shoulders and loins. The same may be said of those cases of great cutaneous irritation which are sometimes seen in patients who are jaundiced; here, however, in addition to the distribution, we have the yellow tinge of the skin and conjunctivæ to help us in our diagnosis.

In true prurigo the primary lesion consists of a small papule, and the secondary manifestations—excoriations, pustules, &c.—resemble those of prurigo pedicularis. But the regions preëminently affected are the lower parts of the legs, next the thighs, the abdomen, the forearms and arms. The bends of the joints are free, and the shoulders are very little affected. Moreover, it is a disease which *always* dates back to early childhood, if not to infancy. The skin of the lower extremities is thickened and dry, and communicates a peculiar, rough, dry feeling to the hand when rapidly rubbed over it. The inguinal glands are also always enlarged. As this disease is a terrible infliction to the victims of it, and is incurable, it is very important with regard to our prognosis not to confound it with prurigo pedicularis, which yields to the simplest means of cleanliness.

With regard to scabies, the presence of the acarus, or its burrow, gives us, of course, a sure diagnosis. But even without this, the differential diagnosis is not difficult. The parts especially affected in scabies are the abdomen and front part of the thighs and the nates, the legs and arms being comparatively free. Moreover, the secondary manifestations seem to take more of an eczematous character, and we rarely, if ever, see such excoriations and boils as we do in prurigo pedicularis. The characteristic pigmentation of the latter is also wanting.

From what has been said, it must be seen how important it is to become accustomed to the general appearance of a cutaneous disease by seeing the whole skin at once. Hebra insists on this point, and always strips his male patients entirely. In that way an idea of the different distribution of different diseases is obtained that no amount of description can give, and I am confident that any student who had followed Hebra's clinic for a month would, at first sight, have pronounced a case to be one of prurigo pedicularis, which was pointed out to me at the St. Louis, in Paris, as a specimen of the "cethymofuruncular diathesis."

The treatment of prurigo pedicularis is most simple—remove the cause. From what has been said of the habits of the louse, it is evident that to do this nothing is necessary but to remove the clothes; and the use of parasiticides, as solutions of corrosive sublimate, mercurials, sulphur ointments, &c., as recommended in the books, is not merely superfluous but positively injurious, as they only increase the irritation of the skin. The clothes should be either boiled, or baked in an oven, at a temperature high enough to destroy the insects and their eggs; for this, 160°, the temperature at which albumen coagulates, is enough. The patient should have a few tepid baths for the sake of cleanliness, the crusts should be removed by emollient poultices or salves, and in a short time he will regain a normal epidermis, though the pigmentation will remain for some time.

That a knowledge of the appearances produced on the skin by vermin is not useless will, I think, be shown by the three following

cases. At a hospital in Paris, I saw what was called a typical case of Addison's disease. The patient had the discoloration of the skin, the cachexia, to a marked degree, the pains in the ilco-lumbar regions, which have been described as symptoms of that disease, and also an obstinate diarrhœa. The discoloration of the skin was nothing more than the result of lice, and the *interne* on service told me that the man was covered with vermin when admitted to the hospital; he also said that he had physical signs of a cavity at the apex of one lung. The man died, and by the politeness of the *interne* I saw the autopsy. There was a cavity in one lung; both were the seat of tubercular masses, and the whole of the intestine was studded with small ulcerations, but the supra-renal capsules were normal. Had there by chance been a tubercular mass found there as well as elsewhere, it would of course have gone down to posterity as another well-marked case of morbus Addisoni.

A short time afterwards, I saw a similar case at another hospital, on which one of the ablest young men in Paris lectured for an hour, as a case of Addison's disease. It was the more interesting, he said, from the fact that it was combined with vitelligo. What he pointed out as vitelligo were the small white cicatrices in the centre of dark pigmented spots, which were left by furuncles. The distribution of the pigment was such as to leave no doubt as to its having been caused by lice, and the patient told me afterwards that previously to entering the hospital he had lived in great misery and want, and had at that time been troubled with great itching of the skin. On a very imperfect examination, I found slight dulness and rudeness of respiration at the apex of one lung. Patient had had hæmoptysis and an obstinate diarrhœa. As he was still alive when I left Paris, I cannot say that there was no disease of the supra-renal capsules; but whether there was or not, it was evidently like the case previously mentioned—simply a case of tuberculosis in a person who had been infested with lice.

I was consulted last summer, in Paris, by a young gentleman who had just returned from a journey in the East and up the Nile. For six months he had been suffering with what he called a horrible cutaneous disease; he had been under treatment, and the physicians had told him that his blood was in a very bad state. He had taken arsenic for three months, at the end of which time his "digestion was so disturbed" that his treatment was changed, and he was put upon a course of belladonna. There was, however, no improvement, and he was very much discouraged about his health.

On examination, nothing was to be seen but marks of violent scratching; his legs, especially about the ankles, were covered with excoriations, pustules, scabs and furuncles. I told him that the only cause of his trouble was that he had been for a long time severely bitten by fleas, bedbugs, and perhaps other vermin. He said that the boats and hotels in the East were very filthy, but could not believe that

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such results as he had on his skin could be produced by such causes, unless his blood were in a very unhealthy condition. As I felt sure that, having got away from the East, he would not be any more troubled, I gave him some simple soothing lotion and persuaded him to wait. On seeing him again, he told me that he began to think I might be right, as he had had a slight relapse, and on examining his clothes had caught a flea. I saw him a few days ago, perfectly well, and convinced that his troubles were not due to any mysterious disease of the blood.

In this case, a knowledge of the effects of vermin on the skin would have at least been useful to the following extent, viz., the waste of a large amount of arsenic would have been prevented.

Reports of Medical Societies.

EXTRACTS FROM THE RECORDS OF THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT. BY CHARLES D. HOMANS, M.D., SECRETARY.

SEPT. 9th.—*Cases of Ascites*.—Dr. MORLAND reported the following cases of patients under his care at the City Hospital. The notes were furnished by Mr. R. H. Fitz, one of the Medical House Officers. In the first two patients, peritonitis followed *paracentesis abdominis*.

CASE 1.—*Ascites; Peritonitis after Tapping; Fatty Degeneration of the Kidneys*.—Emma Y., a cook, 28 years old, entered the hospital on the 27th of April, 1867. She was of dissolute habits, and confessed having had a child, although unmarried. She acknowledged indulgence in spirituous liquors, and had a broken-down, dissipated aspect. Her statement was, that, in December, 1866, she caught cold, and dyspnoea, with cough, followed. She was able, however, to do her usual work, until about the first of April, 1867, when dropsical swelling first appeared. Sharp pain was felt, at this time, in the lumbar region. No hæmaturia is reported. Nausea, vomiting, and a certain amount of delirium supervened. Edema began in the feet; and, in the course of a week, the legs and abdomen were swollen. During the two weeks just preceding her admission, the right arm and chest have become much enlarged. She lies, constantly, upon the right side, and has done so for several weeks—decubitus on the left side causing sharp pain in the left lumbar region. Her appetite is good, but the ingestion of food excites nausea and vomiting. At times, the patient is dizzy, but no complaint is made as to the eyesight. The catamenia were regular until two months before the dropsy appeared; since then, there has been persistent leucorrhœa.

At the time of her entrance into the hospital, her respirations were 32 in the minute, her pulse 120. The right arm and the right side of the chest were œdematous, pitting deeply on pressure; there was ascites, and the legs were œdematous. Two small ulcerations on the calf of right leg, caused by distention, gave rise to a copious flow of serous liquid. Left chest healthily resonant; right somewhat dull. Respiratory sounds normal in left lung; feeble at the base of right