1. The general coincidence of a diminished discharge with increase of hearing. This will appear by the notes taken March the 3rd and 28th, April the 29th, May the 13th and 27th, affording evidence of the influence of mechanical impediments in the production of deafness. Too much stress, however, must not be laid on this explanation; as in the notes of the 1st of April, and the 1st and 25th of July, the visible condition of the ears and hearing did not correspond; that is to say, the ear which apparently was the worst, and contained the largest quantity of discharge, possessed the greatest amount of hearing. Still, as a general rule, the reverse is the case; so that on removing the discharge the hearing is improved. Thus, in the note made March 14th, it will be seen that the hearing distance before the syringing was nothing, but on removing the matter it was immediately increased to one inch. There is, therefore, a mechanical relation between the discharge and the hearing, though probably both the one and the other are dependent on the structural condition of the organ of hearing itself; this last condition regulating both the discharge and the hearing. These remarks apply not to this case only, but to all those in which a diminution of discharge is attended with improvement of hearing. It is not to be supposed from the cases hitherto reported, that such an improvement is the necessary consequence of stopping a discharge from the ear. I shall adduce examples in a future number, in which the opposite result ensued; and I would refer to the notes made of the condition of this patient on the 24th June, as evidence of the obscurity which surrounds the diagnosis of many of these cases; there being on this occasion an entire absence of discharge in both ears, which visibly resembled each other, yet the hearing distance of the one was sixty-four inches, of the other only eight. I would not, however, attach much importance to this patient's statement, who was prone, like most deaf persons, to deceive himself on the subject of his hearing.

2. The next point to which I would direct attention, is the frequent and sudden loss and recovery of hearing, occurring sometimes in one ear, sometimes in the other. The sudden paroxysms of hearing, if I may make use of the term, coming on with a report or crack, on blowing the nose, or otherwise, are a very frequent phenomenon in diseases of the ear, and are met with more commonly in those cases in which the membrana tympani is present, than where it is absent. The analogue of this is observed in ordinary catarrh, in which the functions of one nostril, both as a breathing and as an olfactory organ, are frequently suspended or transferred from one side to the other, and as suddenly recovered, either spontaneously, or on change of posture, or on sneezing. In bronchitis, too, it is not unusual to have one of the smaller bronchial tubes temporarily closed; and thus the function of that part of the lung to which its ramifications extend, becomes for a time suspended. The sudden access and disappearance of asthma or of colic, are likewise examples having some bearing on the phenomenon in question. It is pretty evident too, that the cause of these sudden changes is mechanical, dependent either on the greater or less vascular turgescence of the lining membrane of these tubes, the presence or absence of viscid mucus, muscular spasm, or, as in colic, air becoming impacted, and then suddenly freed from its imprisonment. I have already, when commenting on Tranch's case, mooted the question of, how far the opening or closure of the Eustachian tubes may conduce to these results? and I have there hazarded an opinion, that the improvement which is observed to be coincident with a patent condition of these tubes, is due less to a restoration of their function than to the altered and improved condition of the mucous membrane lining them and the tympanic cavities; and I have hitherto met with no fact which invalidates this opinion, which, it must be understood, has reference only to those cases in which the membrana tympani is partially or wholly destroyed.

3. The third point suggested by a perusal of this and analogous cases, is the great proneness of the sufferers to attacks of catarrh, and the liability of the ear to partici-

pate, more particularly when the membrana tympani is imperfect or wanting. I have before remarked on the influence of temperature in this class of diseases; and the present affords a still more striking illustration of the same fact: thus we find a gradual increase in the hearing power as the temperature rises, till in June and July both had attained their maximum. A gradual yet perceptible diminution in the hearing then follows, corresponding with the decline of temperature, till in the month of December, the hearing was in much the same condition as it was in February, when the patient first came under my care. It is true, the treatment may not have been persevered in after the patient ceased his attendance in September; yet, during that time, the fact alluded to was sufficiently remarkable, and accords entirely with my experience of other similar cases. The diminution of hearing in the winter months, I believe to be mainly due to the prevalence of a less healthy condition of the mucous membrane lining the respiratory passages generally, and their diverticula the tympanic cavities in particular; while the increase of hearing in the summer months arises from an opposite condition of the same membrane. This, it will be perceived, is merely the application of a generally recognised fact to the explanation of the phenomenon in question—an explanation, I think, equally applicable to those variations of the hearing power which are observed to occur at the same season of the year, under different states of the atmosphere or wind; it is, at all events, more consonant with our knowledge of the diseases of the mucous membranes, than the theory which attributes these variations of hearing under different atmospheric conditions to the hygrometric properties of the membrana tympani.

4. Lastly, must be mentioned the existence of tinnitus, both in this and the preceding case; proving, in opposition to the opinion of Mr. Wilde, that this symptom may be present not only with an open tympanal membrane, but where this structure has been entirely removed.

[To be continued.]

9, New Burlington Street.

ON THE ORIGIN AND TREATMENT OF CHRONIC DISEASES OF THE SKIN.

By THOMAS HUNT, F.R.C.S., Surgeon to the Western Dispensary for Diseases of the Skin.

NO. V.

ORDER III. RASHES (EXANTHEMATA).

AN impression prevails that the order exanthemata of Willan comprehends all the eruptive fevers, and no other diseases; hence the author of a paper which appeared a few years since, on the Epidemic of Boils and Carbuncles, calls this epidemic "a new exanthem"; and it is common for authors to speak of all eruptive fevers as "the true exanthemata". But the exanthemata of Willan consist simply of "superficial red patches, variously figured, and diffused irregularly over the body, leaving interstices of a natural colour, and terminating in cuticular exfoliations". This order, therefore, excludes variola, varicella, and vaccinia, as consisting of pustular or vesicular eruptions, and includes not only those eruptive fevers which come under the above definition, namely, rubeola, scarlatina, roseola, and erythema, but also urticaria and purpura. Of the true exanthemata, therefore, there are but two strictly chronic diseases, namely, urticaria and purpura, though both of them have an acute form. These two diseases have no pathological character common to each; I shall therefore treat of them separately.

Chronic Urticaria. The appearance of this disease is similar to that of the acute form, except that the eruption is less obvious and distinct; but it differs chiefly in this, that it originates in a vitiation of the blood, whereas acute nettle rash arises from the presence of indigestible matter in the stomach, and is therefore easily cured by an emetic, if properly administered.

Diagnosis. Chronic urticaria, consisting of white ele-

vated patches or wheals, surrounded by a finely-shaded bluish, visible only when the surface is heated, and chiefly appearing in the parts covered by the dress, and producing a tingling or itching like that excited by the stinging-nettle, can scarcely be mistaken, when visible, for any other disease. But when the patient applies for treatment, it often happens that the eruption is in a state of retrocession, so that little of it is to be seen, except the reddish marks or scratches inflicted by the patient. Its evanescent form and its frequent recurrence, after vanishing for a few hours, distinguish it from erythema and roseola, which are more persistent for the time, but limited in their ultimate course.

PROGNOSIS. Urticaria, in its chronic form, is one of the most capricious of all cutaneous diseases. It may yield to treatment in a week or two, or it may recur at short intervals for months or years together. It is never a disease of magnitude, but it is very troublesome sometimes, and although it commonly subsides sooner or later, it is impossible to assign limit to its duration.

TREATMENT. The disease commonly appears in young, fair, and delicate subjects, chiefly females; it is rarely associated with organic disease, though not unfrequently attended with costiveness and an irregular circulation. The treatment should therefore be directed in the first instance to the secretions; and saline aperients combined with tonics often prove efficacious. I have found great use in a combination of the sulphates of magnesia, potash, iron, and quinine with the sulphuric acid, and this may be continued for five or six weeks according to circumstances, so as to purge the bowels gently. Failing these, if the urinary secretion is scanty or loaded, nitre, acetate of potash, or the bitartrate of potash will often prove highly useful as diuretics. A tepid bath is also eminently serviceable. When every sign of perfect health is present, arsenic is found as useful in this as in other affections of the skin, but it should not be administered in the first instance. A change of residence is sometimes alone sufficient to relieve the patient, and when the disease is unusually troublesome it should be recommended; but the sea-side should not be preferred. This disease, though exceedingly common of late, is scarcely of sufficient severity to require illustration by cases. I therefore pass on to

Purpura. This disease consists of purple specks or patches, and may be said to reside in the coats of the capillaries, which lose their tonicity, and allow their contents to escape. Although first manifested in the skin (*purpura simplex*), it affects all the tissues sooner or later, and unless speedily arrested, proceeds from the stage of slight and partial extravasation to that of hæmorrhage (*purpura hæmorrhagica*). There are several varieties of purpura, which, originating from very different conditions of the system, require a great variety of treatment. Willan's notion that it is always "attended with general debility" is very fallacious and erroneous. In truth, it ought not to have been put down as a skin-disease; and as it is always attended with danger, and sometimes treated on erroneous principles, it would require a more lengthy discussion than the space allowed for these illustrations would permit. I therefore decline to enter further upon it in these papers, especially as I hope on some future occasion to bring the subject more prominently before the members of the Association.

ORDER IV. VESICATIONS (BULLE).

Erysipelas, pemphigus, and pompholyx are the only genera arranged by Willan under this order.

Erysipelas in its milder attacks scarcely produces vesications, but the disease is always acute and of limited duration, and therefore does not come under our notice. The transient redness which patients call erysipelas, is generally some form of erythema.

Pemphigus is invariably an acute and formidable and generally a fatal disease; but it is very rare in this country, and probably neither Willan, Bateman, nor Cullen ever saw a case of it, for they all express doubts of its existence as a separate and distinct disease, believing that it is only a form

of erysipelas or typhus. I have, however, through the kindness of Mr. Marson, seen one case at the Small-pox Hospital, which proved fatal about the fourth day. The patient was a young and hearty female. She was attacked with slight fever and small vesicles, which in the first instance were mistaken for the vesicles of small-pox, and she was therefore sent to the Small-pox Hospital; but they rapidly increased in size, and covered the whole body, as if she had been immersed in boiling water. The clear serum soon became of a dark sanious colour, and was discharged in large quantities. The mucous membranes of the nose, throat, and conjunctiva were similarly affected, and a purulent discharge issued from the inner canthus, such as occurs in glandered subjects. The vagina also discharged a most offensive fluid, evidently partaking of the disease. It does not appear to have been contagious. The disease called by some modern writers "chronic pemphigus", is by Willan denominated

Pompholyx, "an eruption of bullæ without any inflammation round them, and without fever". This also is usually a rare disease, but of late it has been so common as to deserve to be called an epidemic.

The **DIAGNOSIS** cannot be mistaken.

The **PROGNOSIS** is very uncertain, and

The **TREATMENT** must depend upon the cause, if it can be ascertained.

CASE I. *Pompholyx Diutinus*. A. P., a widow, aged 56, applied at the dispensary, September 3rd, 1852, complaining that for twenty years she had been troubled "on and off" with an eruption of small blisters on various parts of the body. They were now visible on the knees, hands, and legs. She was not strong in health, and the bowels were costive. In some parts the vesicles were small and eczematous, in others, bullæ as large as an almond would be thrown out. During the treatment, which was purgative and alterative, the eruption shifted its seat and appeared in the neck and about the mastoid process. The progress was unsatisfactory. She at one time recovered under mercurial pyalism, but the disease soon recurred. She then complained of rheumatism, and the skin recovered for a time under colchicum and arsenic. She afterwards went into the country, got well there, but was subsequently attacked with boils. She suffered from hæmorrhoids, febrile attacks, rheumatism, and dyspepsia, and at length absented herself from the dispensary. The general health had never been good.

In the following case, which is very similar in outline, the patient recovered perfectly.

CASE II. *Pompholyx Diutinus*. S. J., aged 40, mother of four children, applied at the dispensary Nov. 25th, 1851, having been troubled for about eighteen months with an eruption of blisters, formerly in the feet, but more recently on the face, head, and hands in constant succession, which dried slowly into scabs. Her health was much impaired, the bowels were constipated, the appetite bad, the tongue red and furred, and there was pain in the head and scrobiculus cordis. The catamenia were irregular, sometimes suspended for months, then recurring copiously every fortnight, with leucorrhœa in the intervals. She was treated for several months with purgatives, tonics, and the mineral acids, with occasional, but only temporary improvement; then with iron and arsenic. She ultimately recovered under the latter medicine, and was discharged cured, and in much improved health (having gained flesh and strength), on the 13th of July, 1852, after more than seven months' treatment.

I by no means wish to hold out that arsenic is a specific for this disease; still it was administered in this case because every other medicine failed, and I think with success. It also succeeded in another case, in which the eruption, of bullæ, was confined to the soles of the feet (*pompholyx benignus*). Here the affection was very similar to that sometimes caused by arsenic itself after a long-continued course.

Dr. Bateman describes a third variety (*Pompholyx solitarius*) as "a rare form of the disease, which seems to affect only women". One large vesication usually appears in the

night, accompanied with a tingling sensation. It rapidly distends itself, so as to hold sometimes an ounce or two of lymph, bursts, and leaves an excoriated surface which soon heals, and in a week or two another solitary bulla appears. In my experience, these commonly appear on the thigh. I have once seen it in an apparently healthy child. The treatment required will be suggested by the state of the patient's health; but it should be noted that the warm bath at a high temperature sometimes aggravates the disease.

ORDER V. PUSTULES (PUSTULE).

A pustule is a small circumscribed tumour, consisting of an elevation of the epidermis, containing pus, and generally surrounded by an inflamed base. It is remarkable that Willan should have placed variola in this order, and vaccine and varicella under the order *Vesiculae*. Probably the pustules of these diseases are all preceded by vesicles, containing clear lymph in the first instance.

The chronic affections placed in this order are: 1. Impetigo (small pustules). 2. Ecthyma (large pustules). 3. Porrigo, and 4. Scabies; both of which frequently appear and run their course without any pustules at all. Indeed the term porrigo is applied to a variety of diseases which appear to have no property in common, except their locality in the scalp.

Impetigo and *Ecthyma* I shall treat of under one head, as there is no difference between them, except that in the former the pustules are small and clustered, and, in the latter, large and segregated. Chronic pustules, whether large or small, usually betray an asthenic condition of the system associated with a vitiated state of the blood. This may be considered (though not without exceptions) as a rule as well established as that papulous eruptions are associated with a tonic or sthenic diathesis. It often happens that after papulous, squamous, or eczematous eruptions have been subdued by depletion and a restricted diet, pustules take the place of the original eruption; thus the tendency to cutaneous disease remains after the tendency to sthenic inflammation is subdued. Moreover in weakly, ill-fed children, such diseases as eczema, scabies, and pompholyx, generally tend to pustulation. Pustular eruptions chiefly occur in children.

DIAGNOSIS. Impetigo and ecthyma may both be confounded with other diseases. Impetigo may be mistaken for herpes, which latter disease, though primarily consisting of clustered vesicles, terminates in a degeneration of their serous contents into a purulent or sero-purulent matter, which when discharged, leaves a scab, not unlike the impetiginous crust. But herpes is an acute and ephemeral disease; impetigo may persist for months or years. Ecthyma may be mistaken for scabies: indeed the pustular form of itch resembles ecthyma so closely that the diagnosis can only be made clear either by the history of the case, showing its contagious origin, or by detecting the acarus, which is perhaps always present, though seldom seen, in scabies. It may be remarked, however, that ecthyma is seldom attended with itching, while scabies invariably is. Ecthyma may also be mistaken for rupia, especially when both are present, and it has been mistaken for variola.

PROGNOSIS. These pustular diseases are easily enough cured where the patient can command the necessary diet and regimen. Among the poor, especially where there is a lack of food and a neglect of cleanliness, it is impossible to say how long the disease may continue.

TREATMENT. In recent cases, active purgatives combined with tonics and a generous diet, with frequent cold or tepid bathing, are all that is generally required. When the case is of long standing, or when this treatment is not sufficient, arsenic may be required, but it is rarely necessary.

CASE I. *Impetigo*. A healthy child, aged 18 months, having recovered from an attack of "swine-pock", had been suffering for two months from an irritable eruption of small clustered pustules forming crusts, in the temples, ears, and limbs. A solution of sulphate of magnesia, with sulphuric acid, was first prescribed, but apparently without benefit.

The eruption rapidly declined under a short course of Fowler's solution, in doses of seven minims per diem.

CASE II. *Impetigo*. A pale, unhealthy boy, aged 12, subject from infancy to pustular eruptions, applied at the Dispensary June 1, 1852, with impetiginous crusts covering the hands and fingers and the angles of the mouth. The hands were swollen and useless, both of them being covered with a dark, straw-coloured crust, in the interstices of which fluid pus could be seen. He was treated by a long course of purgatives and quinine with temporary benefit, and he afterwards took the liquor arsenici chloridi in doses of ten minims thrice a-day, and was discharged cured Dec. 3rd, after six months' treatment. The nails of several fingers were affected by the disease, but recovered their form eventually.

CASE III. *Ecthyma*. A healthy looking man, aged 29, had an eruption of large distinct pustules freely dispersed over the right hand and arm. The disease had continued for a month. No cause could be assigned for it; and no other part of the body was affected. The bowels were constipated, and the tongue coated; but the patient described himself as in good health. A drastic purgative was ordered to be taken every other night, and a drachm of sulphate of magnesia with ten minims of dilute sulphuric acid, three times a day. Under this treatment he recovered in a fortnight. Ecthyma will generally yield to this kind of treatment; but there are cases in which tonics are also required.

CASE IV. *Ecthyma*. A single woman, aged 30, of weak habits, had been annoyed for twelve months together with a most disfiguring eruption of large pustules on the face and chin. They were sometimes as large as small boils, and very painful. Her bowels were regular; catamenial discharge regular, but scanty; tongue red at the tip; papillae red and prominent. Quinine and sulphate of magnesia, with sulphuric acid, were administered for a fortnight. Under this treatment she improved gradually; but complained of weakness and pain in the back. The medicine was then changed, and chloride of arsenic given for three weeks, when she was discharged in much stronger health, and perfectly free from eruption.

Porrigo. This word was adopted by Willan as a generic term, comprehending several distinct diseases of the scalp, all of which were supposed or assumed to be contagious. Though placed among the pustulæ, it includes at least one disease which has no pustules, alopecia (*porrigo decalvans*), and though said to be contagious, it includes the crusta lactea (*porrigo larvalis*), which is not contagious. I shall, however, adhere to the Willanean nomenclature, and describe these various diseases under the time-honoured names by which they are known in this country, reserving to myself the opportunity of treating, under the general term porrigo, all those cutaneous diseases which are supposed to be peculiar to the scalp. And I may first observe that the definitions and descriptions of these diseases as given by authors are, for the most part, beautifully clear and distinct; but it happens that the descriptions of one author seldom agree with those of another; and the actual appearance of these diseases, taken in the aggregate, agrees even less with the authors than the authors with each other. Here and there among a multitude of cases you may possibly select the well marked porrigo lupinosa, porrigo scutulata, etc. of Willan: but the plain and practical truth is, that for one "well marked" case we meet with a hundred which will not strictly come under any definition, which may or may not be contagious, which may or may not be constitutional, which may or may not be of parasitic origin. At the risk of being charged myself with unobservant habits, I hesitate not to say that the diagnosis of these diseases is very generally impossible; and that the treatment, to be successful, must be founded, not upon principles derived from artificial distinctions which do not exist in nature, but upon the philosophy of disease in general. But the subject must be deferred to the next paper.

[To be continued.]

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