CLINICAL LECTURE ON VARICELLA-PRURIGO.

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GENTLEMEN,—We meet occasionally with an eruption in children, concerning which it might, with some plausibility, be asserted that it is a kind of persistent chicken-pox. When the eruption first shows itself, it either is chicken-pox, or exactly like it. The cases, from the observation of which I make these statements, have seldom been of less than some months' duration, and in nearly all the mother of the patient stated that the doctor who first saw the case said that the rash was chicken-pox. In a few, the original diagnosis had been "modified small-pox"; and in some others it had followed so closely on vaccination that it was attributed to it. In a few others, no medical opinion had ever been obtained, but the mother described the eruption as having come out copiously, and as having consisted of clear watery vesicles. I think, therefore, that I am safe in stating that it is probable that these cases do begin as *bonâ fide* varicella. Their peculiarity consists in that the eruption, instead of disappearing in a few days, is indefinitely prolonged by the succession of fresh crops, and that the spots ulcerate and scab, sometimes becoming large sores. Great irritation is produced, and the child becomes fretful and thin. The eruption may last for months, and the spots then come to resemble ecthyma on the one hand, or yet more frequently the disease known as "lichen urticatus".

I do not think that after the first stage we ever notice any vesicles so similar to those of varicella as to be likely to be mistaken for them, but throughout its course the disease is attended by the successive formation of fresh vesicles of a certain kind. On parts where the skin is thin, these vesicles are like those of pemphigus on a small scale, become turbid very quickly, and are soon broken by the patient's scratching. On the palms of the hands and soles of the feet, however, it is not uncommon to find perfectly transparent vesicles somewhat deeply placed, which persist for a few days. Wherever on the thinner parts of the skin the miniature bullæ have been broken, red excoriated or scabbed patches result, and on the scalp thick heaped-up scabs like those of porrigo may sometimes be seen. The eruption is attended by intense irritation, and everywhere the child's skin shows the effects of scratching. It is not uncommon for the mother to assert that the child scarcely sleeps at all. Now and then this eruption, as I have said, is attributed to vaccination; but in these cases there is usually the history also of a varicella-like eruption. Some years ago, Dr. Flack of Shoreditch brought me an interesting example of this occurrence. He had himself vaccinated the child, and when the rash not long afterwards came out, he made no question that it was chicken-pox. The rash, however, did not disappear, but persisted for three months, covering the whole surface and wearing the child out by the irritation produced.

I saw this child only once; but, on inquiry some time afterwards, I learnt from Dr. Flack that the eruption had persisted in spite of treatment, and had ended in death. I will read to you Dr. Flack's note, which contains some further particulars of this interesting and important case. It is the only one in which I have ever known death to follow, but in several others the patient has been very ill.

"56, Shoreditch, May 2nd, 1871.

"DEAR SIR,—I find the child you inquire about gradually went from bad to worse, and died in August, 1866, after suffering for nearly five months. Treatment entirely failed. Dr. P. saw the child afterwards, and was of opinion that it was syphilitic, but I could obtain no history to confirm it. I may say that the mother, for eight months of her pregnancy with this child, suffered extremely from pruritus of the vulva, so much so, that fears were entertained of her mind giving way; and this continued within twenty minutes of her confinement. The child was apparently healthy, and very clear in the skin till three months old, and was then vaccinated. The pustules were good and the inflammation not great; but, as the scabs began to form and dry, the eruption appeared with all the symptoms you so well describe. I have thought the sufferings of the mother might have produced such an irritative state of the child's system, that it only wanted an exciting cause to develop it.

"I am, yours truly, JAMES FLACK."

Dr. Flack's suggestion that the child inherited a pruriginous skin is, I think, highly probable. In several other examples of the malady, I have found that there was a history of pruriginous or urticarious complaints in the child's family; possibly it is chiefly in such that vaccination-rashes and varicella become pruriginous and persist. I may add that I had carefully examined this child as to inherited syphilis, and could find no reason to suspect it. An antisyphilitic course which was carried out (not on my recommendation) did no good whatever. This is the only actually fatal case which has come to my knowledge.

It becomes a most interesting question in such cases as this to determine as to what connection the vaccination had with its sequences. It is possible that it has none at all, and that the eruption is a true varicella; for the age at which vaccination is usually performed is the same as that at which varicella is most likely to occur. We must remember, however, that, according to the observations of Mr. Ceely and many others, various forms of exanthem-eruption do occur as the direct results of vaccination, and that a vesicular one is the most common. Indeed, the wonder is not that vaccination should sometimes produce an exanthem, but that it should ever be without one.

A portrait (No. 32*) which has been issued by the New Sydenham Society, illustrates remarkably well the local conditions of the disease under consideration. It was taken from a child, aged three months, in whom the diagnosis of varioloid had in the first instance been given; but as it occurred during the epidemic of small-pox in 1871, it is probable that not a few cases that were really varicella, got the name of the more severe disease. I show you the portrait of the patient referred to, and may remind you that, on a former occasion, you had an opportunity of seeing the child itself. The following are the notes of the case.

George Thornton, aged three months, and at the breast, was admitted on April 21st, 1871, with an eruption which had then lasted for six weeks. It was stated that the rash came out rapidly at first, chiefly on the arms and legs, and that it was said to be small-pox. The patient had never been vaccinated at the time when he was brought to the hospital. No one else in the house had had either small-pox or chicken-pox. The two other children in the house had had no eruption of any kind. The mother described the rash as consisting at first of large clear watery spots. When first seen, the child had a copious eruption of vesicles and pustules on the hands, feet, arms, and legs, and a crop of large porrigo patches on the head. There was no evidence of the existence of itch-mites.

I will now read to you the notes of some other cases of a similar kind. I may here observe that all of these have been sporadic. I have never met with this form of persistent pruriginous varicella, or, more strictly speaking, of persistent vesicular rash following varicella, as an epidemic malady. In a former lecture, however, I quoted a passage from one of Trousseau's lectures, which stated that, during an epidemic of varicella at the Necker Hospital, some cases were protracted for six weeks, and passed into an ulcerating form of eruption, looking like pemphigus. You will find the lecture in the second volume of the New Sydenham Society's *Translation*, and it is well worth reading. Trousseau does not mention prurigo as having been a marked symptom, nor does he say anything about the eruption having occurred on the palms or soles, and he mentions the period of two months as if it had been the extreme limit of duration. Now, in all my cases, the pruriginous element has been a very marked one; the condition of the palms and soles has been a peculiar feature; and the duration of the eruption has been much longer.

CASE I.—Rosina Childs, aged 18 months, was admitted on Feb. 19th, 1869, suffering from a very copious eruption of vesicles or small bullæ on the extremities, trunk, and face. It avoided the flexures, but was very marked on the soles and palms, and this latter feature led to the suspicion that the case might be scabies, but there was no evidence of the presence of the itch-mite. The vesicles when commencing were very firm, and felt quite shotty. The eruption had already lasted four months, and the mother's clear statement was, that it appeared all over the body at once, and that the doctor to whom she took the child considered the disease to be small-pox. She stated that there had been some spots on the head. The rash was attended by great itching. The patient was pale, but seemed in other respects healthy. She remained under treatment for five months without any material permanent improvement. The spots altered somewhat in character; some of the later bullæ were as large as peas, and it was noted after the child had been attending for some months, that many of the spots passed into pustules. As the child was eighteen months old, no doubt she had been vaccinated, but my notes do not mention this point.

CASE II.—Edward Barfoot, aged 16 months, came under my care in

* See my Catalogue of the *Atlas*, p. 107.

May 1869. He was pale, and seemed out of health. He presented a copious eruption of vesicles and papules in various stages, and affecting the face, trunk, and limbs, and, to a slight extent, the scalp. The fresh spots consisted of elevated pointed papules, feeling very firm, and each surmounted by a small vesicle. In the older ones the vesicle had sometimes broken, but in the greater number it had dried up; on the scalp, the spots had sometimes run on to porrigo. There were a few on the palms and soles. The eruption avoided the flexures; was more abundant on the back than on the chest and abdomen. It was evidently excessively pruriginous, and there were numerous scratches. The mother's history was, that the rash had appeared when the child was three months old, and soon after vaccination, and that the medical man in attendance told her that it was "glass-pock". The eruption had varied in intensity at different times, but had never been quite well since its first appearance. He remained under care only two months, and I cannot tell you the final result.

CASE III.—Sarah Richardson, aged 11 months, was brought on June 22nd, 1869, with a papular and vesicular rash on the trunk, limbs, and scalp; it affected the palms and soles. The spots were at first small papules, apparently devoid of fluid; presently these became inflamed and red at the base, while at the top was formed a yellowish point, in the centre of which a little dot was seen; while still later, a considerable red areola was present, and a concave scab was formed on the top of the spots. The mother stated that the eruption had been present for five months, and that it came soon after the child had been vaccinated. When it first came out, she thought it was chicken-pox, on account of the "clear watery heads" which were present at that time. An only sister of the infant was free from any eruption.

CASE IV.—Sarah Ann Tosland, aged 19 months, was admitted on July 13th, 1869. She was suffering from a pruriginous rash on the body and on the backs of the hands and soles of the feet; some of the spots were very like wheals of urticaria. The history given was of a gradual onset of the eruption at the age of five months, the mother thinking that it was like chicken-pox. It was said to have been well in winter. The child was of fair complexion and very stout, and seemed muscular and strong, notwithstanding the constant itching she suffered from the rash. She was the youngest of eight children, and the only one who had suffered from any skin-disease. This case is not very well characterised.

CASE V.—Isabella Brown, aged 12 months, a fair-skinned light-haired child, was brought on account of an eruption in September 1869. The rash was general and pretty thickly distributed; it affected the soles, the face, and the scalp, but not the palms. The flexures were avoided. It was distinctly vesicular, and in parts impetiginous from scratching, but there were no large pustules. It had already lasted seven months, and was said to have come out soon after vaccination. The child was nearly well in six weeks.

CASE VI.—Walter F. Seymour, aged 12 months, in good health, was brought on September 24th, 1869. He had a copious itching eruption of papules and vesicles, with some pustules. The parts affected were the trunk, palms of the hands, dorsal surface of the feet, scalp, and, to a less extent, the face. The bulk of the rash was papular. There were, however, some large irregular vesications, with areolæ of congestion, and containing turbid fluid; other spots looked as if they had been about to suppurate, but had dried up before pus was formed in sufficient quantity to break the cuticle; some, especially on the hands and feet, were distinctly vesicular. The rash had been taken in the first instance for chicken-pox. Under treatment, the rash improved for a few weeks, but very soon relapsed and became as bad as ever again.

CASE VII.—Walter Thompson, aged 19 months, admitted on April 2nd, 1869, on account of a very copious pruriginous eruption. He was stout and healthy-looking, and was said to have an excellent appetite. He had been nursed till 11 months old. The eruption had appeared for the first time at the age of 15 months, and it came out about three weeks after vaccination; the vaccination spots having done well. His nurse thought it was chicken-pox; but, from her statement, it seemed probable that the spots were not so distinctly vesicular as in that disease. The eruption had steadily become worse until he was brought to the hospital. There was no reason to suspect contagion from scabies or pedicularia as the cause. The eruption consisted, when first seen at the hospital, of very numerous isolated spots, most of them papular and of dusky colour. The early stage, as seen in some recent spots, appeared to consist in the formation of a vesicle on an indurated base; the vesicles were deeply placed, and contained but little fluid, and it seemed that subsequently they either dried up or had their tops removed by scratching. The rash was most abundant on the limbs and face, the forearms and legs being more thickly covered than the arms and thighs; it occurred in tolerable abundance on the palms and soles.

There were no spots on the scalp or forehead, and the eruption specially avoided the parts where the skin was thinnest, the flexures of the joints and the interdigital clefts. Looking at the soles and palms only, we might easily have mistaken the case for scabies; but its symmetry and uniformity, and its avoidance of some parts, such as the bends of joints and the spaces between the fingers, served to distinguish it from that disease. He got quite well in six weeks under arsenical treatment, and remained well for about eight months, when he again (in April 1870) came under care for a dry lichenous rash. This time, however, there were no vesicles, and the palms and soles remained free.

CASE VIII.—Alfred Vernon, aged 2 years, admitted on September 7th, 1869. His mother stated that the eruption, on account of which she brought him to the hospital, began suddenly when he was three months old as an eruption of clear vesicles. She was told that it was chicken-pox. There was no contagion either to herself or the girl who nursed the patient. When first seen, the child presented a copious itching, scratched, papular, and vesicular rash. The vesicles were most conspicuous on the feet. The rash was most abundant on the outer parts of the arms and thighs, on the backs of the forearms and fronts of the legs; it avoided the flexures in a very marked way. The backs of the hands were almost free from spots. He was of fair complexion, and had a thick upper lip and fine downy hair on the general surface of the body; he was much emaciated, probably in part from the incessant irritation. He remained under notice, more or less regularly, for more than a year, and improved very much during the earlier part of his attendance while taking bromide of potassium, cod-liver oil, and quinine, and using an ointment of mercury and lead. The eruption, however, relapsed somewhat towards the end of the time.

CASE IX.—Frederick Manger, aged 1 year and 9 months, was admitted on May 9th, 1871, with a pruriginous eruption of nine months' duration. There were five other children in the house, and none of them had suffered from it. The mother thought it was chicken-pox when it first appeared; but the medical man considered it not to be that disease. The child was not known to have had chicken-pox. The rash had never been well since its first appearance.

CASE X.—Samuel Bristowe, aged 15 months, came on October 12th, 1869, and was under notice, more or less regularly, for about thirteen months. He had a severe papular, vesicular, and pustular eruption, which was worst on the legs; the soles and palms were also severely affected. There were spots on the face. It avoided the flexures. It was then of eight months' duration, and was stated to have come out immediately after vaccination, and to have been considered by the medical man to be chicken-pox. There was great itching, and the child was said to be often awake most of the night. The scratching had produced large porriginous scabs in some parts. The child was somewhat relieved for a time, but the rash relapsed several times. There were three other children in the house, none of whom had had any eruption, excepting one who was subsequently brought to the hospital with eczema-porrigo of the scalp from lice.

CASE XI.—Anne Cridland, aged 3¼ years, was brought for an eruption of prurigo urticans in March 1871. It was stated that she had been liable to the rash since an attack of chicken-pox at the age of 2 years.

[To be concluded.]

THE FEVER AT CROYDON; AND INTERMITTENT WATER-SUPPLY AS A CAUSE OF TYPHOID.

By ALFRED CARPENTER, M.D.

THE occurrence of an epidemic of typhoid fever in the district of Croydon, after the cessation of any tendency to that disease for a period of nearly ten years, is worthy of something more than a passing notice, both as to causation and to removal. I propose, therefore, to place the whole of the facts which have come to light with reference to the outbreak before our associates, feeling sure that it contains a lesson worth remembering.

Croydon was visited in October 1865 by an epidemic, which I had good reason to remember. Previously to that date, the ventilation of the sewers in Croydon had been at first suggested to the local authority, and then demanded by those who studied the subject; but for a long time the demand was not acceded to. The facts which presented themselves to the inhabitants at the time of that outbreak were such that the local board, after a long continued struggle against facts, carried out, in 1865, an extensive plan of ventilation by means of shafts connected with the crown of the public sewer, which were placed on the arterial sewers at distances of about a hundred yards from each