sible for the infection to follow the use of towels, or from an uninfected child wearing the clothes of one suffering from gonorrhea.

10 East Read St.

THE LA GRIPPE EXANTHEMATA.*

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During the past winter the locality in which the whole of my life has been spent has been struggling with the weighty problem of whether we were in the midst of epidemics of measles and scarlet fever or whether the exanthems were different manifestations of the same disease and due to the germs of la grippe. The question was of serious interest, as the children of the affected families were excluded from the schools and the business interests of the town were suffering. It was also causing a great deal of hardship in the surrounding community, as a condensing milk company has a factory located here, and as no milk that has been handled by a person coming in contact with a contagious disease is received at the factory, therefore it is no small inconvenience for a dairyman who supplies milk to it to have even measles in his family. The only cases of genuine measles which I saw last winter were in the family of a dairyman six miles from town, and it became necessary for me to inspect the arrangements for milking and caring for the milk while it was being cooled and made ready for the factory, that I might certify to the business manager that all his sanitary arrangements were being carried out, and that the cases of measles were entirely isolated from the dairy and dairymen; for without the attending physician's certificate the milk from fifty cows would not be received at the factory.

I had an opportunity of studying the exanthem before it became epidemic. Nov. 28, 1898, at 2:00 a. m., I was called to see Ruth R., aged 11 months, who was taken suddenly ill with nausea and vomiting after having been unusually well during the preceding day and early evening. She was very restless and irritable, her tongue covered with a thin white fur, fauces slightly reddened but the redness was diffuse and more erysipelatous, with little swelling and no ulcers nor exudate; pulse 120, temperature 102 F. As she frequently had attacks of indigestion and was now cutting her canine and first molar teeth, and was the first baby, I was accustomed to midnight calls, but this time the gums showed no sign of irritation, and the bowels no indication of indigestion. As the mother had suffered with a severe attack of la grippe a few weeks before, and Ruth's symptoms pointed in that direction, I gave some of my usual fever mixture for la grippe and she soon became more quiet. The next morning the pulse and temperature were nearly normal and the tongue coating was disappearing, but she was having some coryza. Giving the child a tonic to be taken for a few days, to prevent relapse, and a nasal antiseptic spray, I dismissed the case. The next day, nearly thirty-six hours from the time the child was taken with nausea, I was recalled to see her. Although apparently otherwise well, she was covered from head to feet with the eruption of measles—large, flat, slightly elevated spots on an inflamed base. Some of the spots had coalesced, making a continuous red, raised surface over the greater part of the face, but on other parts and more over the trunk and limbs white skin could be seen between the inflamed bases of the

eruption; as the child was a pure blond the contrast between the white smooth surface of the epidermis and the inflamed red blotches was very noticeable. Despite her apparent well-being there was a slight increase of pulse and temperature: pulse 90, temperature 100F., bowels regular, tongue clean. I found the bean-like glandular enlargements characteristic of rubella behind *both* ears, which is unusual—one is the general rule, and this frequently so small it is hard to find and easily overlooked.

The epidemic of la grippe and the exanthems began the latter part of December. I saw my next patient January 3. The parents supposed the girl to be ill with scarlet fever. She had taken her New Year's dinner at my house, and I had observed that she did not enjoy it as much as usual, but she enjoyed an after-dinner romp with the other children. On the 2d she complained of malaise and stayed in bed all day, and toward evening she was worse, with fever and vomiting. As they lived in the country, I was not called until the morning of the 3d, when she was covered with a scarlet, pin-point eruption from head to toes, but on the feet and legs the spots were not so near together as on the face and body, there being intervals of healthy skin between. It looked like a plain case of scarlet fever, but the tongue showed no redness even at the tip, and was covered with a moist, white fur. There was some swelling and redness of the fauces, but no exudate. She complained of some soreness in swallowing, but there was no enlargement of the glands, either submaxillary or post-cervical. Even the bean-like swelling behind the ear was scarcely to be felt after the most careful examination, made after I decided from the pulse and temperature, that it was not a case of scarlet fever. While noting the dusky, red appearance of the face, I expected to find a pulse of from 110 to 120, but found one of 84, with a temperature of 99.75 F. She complained of headache, especially in the occipital region, and severe pain through the spine and limbs, but had rested moderately well for the night. The mother was not feeling well, having the same posterior headache and aching through the limbs as did the daughter, but was caring for her household. Her forehead looked red-spotted, but the spots were not raised above the surface. Two children, younger than Anna, had coryza and an eruption a few days later, but neither was very sick, although the eruption in both cases was preceded by malaise and, just before it made its appearance, with nausea and vomiting. I kept all the children in bed until desquamation, which was very free, was complete. The mother and three children had the eruption, the father a severe attack of la grippe without eruption, while the other members of the family, a son, aged 19, who had never had scarlet fever, and a man over 70 years, escaped illness.

The subsequent history of the family is interesting. March 1, they moved to a suburban home and went into a nearly new house. April 1, Anna, who had the eruption in the severest form, developed serious, chloro-anemic heart symptoms. April 8, the son, who had previously escaped the eruption, was taken sick with symptoms of la grippe. After these symptoms abated he broke out with an eruption resembling measles, which he had previously had; I did not see him after the eruption appeared, therefore could not confirm the diagnosis of rubella. In a few days the other three children had the eruption, but a boy of 6 years was not sick enough to remain home from school. None of the three were confined to the house. Since this attack they have all been perfectly hearty.

From the last of December to the first of April the

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epidemic of la grippe was at its height, and also the cutaneous eruptions.

There were three varieties of the eruption, the rubeola form, as illustrated by Ruth R., the scarlatina form, illustrated by Anna B., and still another, papilla vesicularis. The papillæ were not numerous, were of the color of the epidermis, surmounted by a pearl vesicle the size of a pin-head, which, on being ruptured, emitted a clear water. This eruption was accompanied by intense pruritis. One of my genuine measles patients had this form of eruption after a severe attack of la grippe, which came on a month after the attack of measles. When the mother presented the case, a boy of 13, she remarked on the intense itching and, as it was confined to the hands, especially between the fingers, she said: "I think Robbie has had enough this winter with measles and the grip, and now I wonder if he has the itch."

My cases of la grippe with high temperature were not followed by cutaneous eruptions or other sequelæ. Several of my little patients had an axillary temperature of 105 F., and none of these had any rash, although other children of the same family with a lower temperature had severe exanthems. One instance in particular—a boy aged 8 years—had a temperature of 104 F., with nervous twitching and semicoma enough to make me fear he had meningitis. He never developed any eruption, while his mother, with a temperature of 101 F., showed red spots on the forehead, and the baby, aged 8 months, with a temperature of 102 F., came out freely on her fifth day of sickness with rubella. Whether this freedom is due to the high temperature destroying the toxins, or to the freedom with which I gave acetanilid at the beginning of an attack of la grippe with high temperature, is a point I have not yet decided. I regard acetanilid as much a specific for la grippe as quinin is for malaria; and suppose this action due to its strong germicidal powers.

I think it is not contagious, as the children who were closely confined at home were sure to have the exanthem, with sometimes marked la grippe symptoms. Neither were there any serious sequelæ except in the cases with severe coryza, and then abscesses occasionally developed somewhere along the nasal route, or in the middle ear.

My treatment for the exanthems has been principally baths. I years ago learned that nothing was so good for rubella as a warm saline bath. I have seen severe cases with delirium yield to a half hour's immersion in warm water, and after the sleep which followed the bath the patients were as bright and active as though they had not been sick. If there is fever, I give acetanilid and sodium bicarbonate combined, to which is added a little mild hydrargyrum chloridum, if constipated, and Dover's powder, if very restless. For the coryza, antiseptic spray, Seiler's antiseptic tablets, or powder dissolved in water, and for the middle ear a warm 2 per cent. hydrastis solution in glycerin distilled into the ear as soon as the first pain is felt; if suppuration takes place, I cleanse with an antiseptic douche.

I grouped all the exanthems together under the head of German measles, until I was called to Lorna D., aged 16 years. She had been complaining for several days, but did not seem sick enough to need a physician. After she developed the eruption some of her schoolmates called on her and reported that she had the measles. The next day came the request that the other two children, a boy of 14 and a girl of 12 years, be kept home from school, and then I was called to give a diagnosis. She had the pathognomonic symptoms of rubella. I told her that as the school authorities did not like the name

of measles, we would not call it German measles, but would, as she was in the school classics, call it la grippe exanthemata, as the rash was but an accompaniment of the mild attack of la grippe which she had been having, as shown by the history of the case.

DISCUSSION.

DR. C. G. SLAGLE, Minneapolis, Minn.—I have been puzzling a little over the title of the paper just presented. I did not know that la grippe was an exanthematous disease, and I think it would have been more accurate if the title had been "A La Grippe Exanthem." I would like to know whether Dr. Garrison considered the exanthem a part of the la grippe or a sequela.

DR. H. E. GARRISON—I think the exanthem was simply a sequela of the grip.

DR. SLAGLE—I think you have a genuine epidemic of German measles prevailing along with the grip. I would like to know whether any of these children had the German measles before.

DR. GARRISON—I have had these exanthematous eruptions recur after six or eight weeks, but the recurrence was always preceded by the symptoms of la grippe.

DR. SLAGLE—The diagnosis was probably more or less obscured by the use of acetanilid.

DR. I. N. LOVE, St. Louis, Mo.—I consider the title of this paper right. Our observations in St. Louis would seem to justify the conclusion that the majority of the infectious diseases are sometimes associated with rashes. We have them in cerebrospinal meningitis and sometimes in whooping-cough. I believe there is some disturbing effect on the nerve-centers, produced by the toxin of this infectious disease, expressed on the skin in the form of the rash. It is not always present, but is in many cases of la grippe. It is not improbable, however, that some of the cases observed by the reader of this paper represented a combination of German measles and la grippe. We had just such an epidemic in St. Louis, and there were all sorts of complications, and there were suppurative disturbances of the mucous membrane of the nose and throat, leading many physicians to make a diagnosis of diphtheria. I still insist that a case of diphtheria is not diphtheria unless there is the familiar clinical picture of the disease. In an epidemic of la grippe in an asylum, I saw an enormous number of cases, complicated with German measles. In some instances the combined diseases were so severe as to produce death. Some of the cases were diagnosed as plain measles. The bacteriologic investigation showed the grip bacillus in the secretions from many of the cases of rubella. We have a definite entity in the bacillus of Pfeiffer as the cause of la grippe. Our great error in the past has been that we have not recognized fully that la grippe is an infectious disease which is peculiarly liable to attack children, and which has a definite course to run. Its chief danger is to be found in the complications, and their neglect because the physician fails to appreciate the danger.

DR. JOSEPH CLEMENTS, Kansas City, Mo.—We look upon disease largely as an entity, as a something that takes hold of a person, and that must be battled with and overcome. This is a wrong idea. We do not think of health as an entity, as something to be coddled and cared for. The idea misleads us. Our nomenclature gives us the name of the disease, with its symptoms and essential features, and while this is useful, it certainly misleads us, as has been shown in the papers and discussion presented today. When we go to the very beginning of disease, and appreciate the fact that disease consists of vital phenomena equally with health, then we can adopt a nomenclature which will not be misleading either to ourselves or the laity.

DR. H. E. GARRISON, Dixon, Ill.—I simply wish to say to Dr. Slagle, with reference to the production of the rashes by the acetanilid, that in the cases in which this drug was given in largest doses, no rash appeared. In one boy, who had a temperature of 104 F., I gave 1 gr. every two hours until free perspiration was excited. The next morning the mother telephoned that the child was "a hundred per cent. better," and I did not have to make any more calls and the child had no rash. I have had quite a number of similar cases in which, although I gave acetanilid freely, there were no rashes observed as a result of this medication.