A CASE OF NECROTIC STOMATITIS FOLLOWING MEASLES AND PNEUMONIA.1

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The history of the case is as follows: H. A. R., male, aged twenty-one months. The mother states the child has never had any illness. Parents and older brother are well.

February 18, 1904. The present illness began eleven days ago with measles. No physician was in attendance, the child's father being a medical student. The mother states that the rash appeared first on the face, and that there was some conjunctivitis; that the child had very little fever and was up and about.

On examination the child was found to be well nourished; the face red and puffy; the eyes inflamed and swollen; no cyanosis. Evidence of rash in the last stage of desquamation on the chest; respirations rapid; pulse 140. Over the right base rales and bronchial breathing are heard.

The next three days were marked by a gradual improvement. On the fourth day the mother reported that she had discovered a patch on the inside of the mouth the night before. On examination a slough was found one and one-half inches long by one-quarter inch wide, running back from the left angle of the mouth, and confined to the inner surface of the cheek. The gums were not involved. The slough was white in color and very dense. There was no odor, although the mother said she had noticed a bad odor the day before. The cheek was slightly indurated, but not edematous; there was a small purplish spot on the outside, opposite the

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necrotic area. A mouth wash of hydrogen dioxide, half strength, was ordered to be used at short intervals.

On the 24th the mother requested a consultation with Dr. J. P. C. Griffith, who was unable to see the case until the afternoon. Dr. Griffith, however, concurred when cauterization of the necrotic area was suggested, and this was done at noon on the same day with nitric acid, by Dr. J. M. Spellissy. This cauterization did not appear to be very destructive. In the afternoon, when the child was seen by Dr. Griffith, there had been no spreading of the slough, and the condition of the lungs was found to be favorable. He again agreed to the advisability of more radical cauterization with the actual cautery. At this time no spot was seen on the cheek, and there was no odor. The fauces and tonsils presented a clean appearance. On the next day at noon Dr. Spellissy curetted the necrotic area and cauterized it with the Paquelin cautery; the slough had begun to separate at the centre, but had spread slightly at the periphery. A point on the gums opposite the slough was found to be affected. The cheek was less hard and there was no red spot. Both cauterizations were performed under chloroform anesthesia. At this visit the pulmonary condition was distinctly improved, although the temperature was still 101$\frac{3}{2}$° and the respirations 44. The child was seen again in the evening, and was then found asleep and in a very fair condition.

After that the patient came under the care of Dr. M. G. Tull, and recovered within a few days. I saw the child some three months later, when it was quite well.

Before the necrotic area was cauterized, culture tubes were inoculated with some of the material with the following bacteriological result: "Diphtheria organisms found in both throat and mouth; all the cultures showed, in addition, staphylococcus albus and streptococcus pyogenes; no bacilli nor higher fungi observed."

The diagnosis of this case is open to some question. In view of the presence of measles complicated by pneumonia—one of the commonest causes of noma—the evident tendency of the lesion to spread both on the cheek and to the opposed gums, and the character of the diseased tissue, which was dense, tough, and not like a false membrane, I believed I had to deal with a very early stage of the process that terminates in gangrenous stomatitis. The presence of the Klebs-Loeffler bacillus is in favor of this diagnosis, as the micro-organism has been found in a number of cases of noma, although it probably is not the cause of the disease. Walsh found the diphtheria bacillus in eight cases of noma that he examined, five of them following measles; while in fifteen cases of ulcerative stomatitis the bacillus was not present. Sailer has reported two cases following typhoid fever, in both of which cultures of the diphtheria bacillus were obtained, although it should be mentioned that in one of these there was a history of diphtheria a year pre-
viously. Similar findings have been reported by Freymuth and Petruschky, v. Ranke, Perthes, and others. Animal experiments, when any were made, were inconclusive, and some of the observers expressed the opinion that if the bacillus found were really the diphtheria bacillus its virulence was diminished. Blumer and McFarlane, who studied an epidemic and reported their results in 1901, believe that the disease is due to a thread-like organism of the leptothrix type that does not grow on ordinary media, thus confirming the observations of Perthes in 1899. They exclude the diphtheria bacillus as a causal factor. Apparently the leptothrix referred to was not found by the bacteriologist of the Philadelphia Clinical Laboratory, where the examination of this case was made.

Antitoxin has been given in some of the cases in which the diphtheria bacillus has been found, but the evidence of its usefulness is not clear, and since it appears to be proved that the Klebs-Loeffler bacillus is not the cause of the disease, the use of antitoxin does not seem to be clearly indicated. On the other hand, it is difficult to say whether the active cauterization and curettage employed in this case had anything to do with the favorable termination. Most authorities, however, agree as to the advisability of removing the diseased area as completely as possible, either with the cauterie or with the knife.

THE NEGATIVE VALUE OF KERNIG’S SIGN:¹

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My purpose in discussing the flexion-contracture symptom, commonly known as Kernig’s sign, is not so much one of a desire to question its regularity of occurrence in meningitis as to demonstrate or to disprove at first hand, and as nearly as possible, its negative value—viz., its regularity of non-appearance—if there be such a thing, in conditions other than and uncomplicated by meningitis.

Friis, Osler, F. A. Packard, Netter, Chauffard, Sailer, J. E. Miller and others have shown that the sign is usually though not invariably present in cases which leave no doubt as to the presence of meningitis. Tuberculous meningitis would seem more often to fail to present the typical Kernig contracture than the various non-tuberculous forms of the disease. The cases cited by these

¹ Read before the Section of Medicine, College of Physicians, May 7, 1906.