PEDIATRICS.

UNDER THE CHARGE OF

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Diphtheria Bacilli in Noma.—JOSEPH WALSH (*Proceedings of the Philadelphia Pathological Society*, June, 1901, p. 179) reports that he has found diphtheria bacilli in all of eight cases of noma examined bacteriologically. Only one of these cases gave a pure culture of the diphtheria bacillus, and this occurred in a case with associated pharyngeal diphtheria, the child subsequently recovering. Another developed noma during measles, having suffered from diphtheria four months previously, and at the time of development of measles being isolated with another child who also presented clinical symptoms of diphtheria, but with negative cultures as regards this organism. Three of the other cases began just after measles. Four of the eight cases began with an ulcerative stomatitis. Fifteen other cases of ulcerative stomatitis were examined in hope of finding diphtheria bacilli, but with negative results.

He concludes that since noma is a species of moist gangrene, requiring probably, from analogy, two different organisms—one a saprophyte, to produce the putrefaction; another a parasite, to produce the primary necrosis—it is possible that in the cases in which diphtheria bacilli are found they may be the primary causative agent; and, secondly, that when other pathogenic micro-organisms capable of producing necroses are found it is possible that they may be the primary excitants.

Confirmatory Evidence in Favor of the Fourth Disease of Dukes.—FREDERICK T. SIMPSON (*Archives of Pediatrics*, September, 1901, p. 653) adds some confirmatory evidence as to the existence of a fourth disease resembling in some features both rubella and scarlatina, a question which was raised about a year ago by CLEMENT DUKES (see abstract of Dukes' paper in this department of *THE AMERICAN JOURNAL OF THE MEDICAL SCIENCES*, February, 1901, p. 233). An epidemic of twenty-seven cases of eruptive disease was observed by the author at the American School for the Deaf, in Hartford, in the spring of the present year. The symptoms generally resembled those of rubella, the rash in most of the cases being of the morbillous type. A slight branny desquamation followed the rash in the majority of the cases, but in eight desquamation occurred in strips or lamellae—in three copiously and universally—in the others confined to the hands and feet. In one case the epidermis of the entire heel was separated like a cast. The cases to desquamate most copiously were of the scarlatinal type, except one of the morbilliform type. The throat was slightly injected in most of the cases, but in only three or four was there a subjective feeling of

soreness so far as could be ascertained. Enlargement of the post-cervical lymph nodes was a marked feature in every case. If looked for, the axillary and laryngeal nodes were also found enlarged. True strawberry tongue was never seen, and vomiting occurred in only three cases. Six cases developed a second rash at from ten to fifteen days after the appearance of the first rash. One of these looked like a heat rash, but the others were coarse, discrete, and papular.

The points which justified the diagnosis of German measles as from scarlatina were: 1, absence of albumin in the urine in all cases; 2, known period of incubation of two weeks or more in five cases; 3, previous occurrence of scarlet fever in five cases, or 18 per cent.; 4, profuse development of rash in all cases, with slight disturbance of temperature and pulse; 5, absence of vomiting, strawberry tongue, angina, and of complications; 6, morbilliform type in two-thirds of the cases.

In the epidemic of nineteen cases at Ilughy, described by DUKES (*Lancet*, July 14, 1900, p. 89), over 40 per cent. of the patients had already suffered from rubella, which, therefore, proved that the disease in question was not German measles. In the differentiation from scarlet fever, however, as was editorially pointed out by the *Lancet*, two important points were lacking: First, none of the patients had had scarlet fever, and, second, the period of incubation could not be established. In Simpson's cases, however, both these points were determined, so that it may be regarded as demonstrated that some cases of the affection hitherto known as German measles may desquaminate like scarlet fever.

Apart from this interesting observation as to desquamation, of which one of the editors of this department can offer personal confirmation, Dr. Simpson advances evidence in support of Dukes' theory. He believes that in the epidemic he here reports two diseases were present instead of one, and that these two were rubella and the "Fourth Disease."

His evidence for this is as follows:

First, a number of patients, at least five, had a second rash. This occurred between two and three weeks after the first, lasted several days, was accompanied by a slight rise of temperature, but by no feeling of malaise. The rash was always coarse and discrete. It is difficult to account for these second rashes, except by assuming another disease, since relapses in German measles do not occur.

Second, four of the patients were stated to have had rubella previously. This has not the same probability as the statement that five of the pupils had had scarlet fever, for it will be recalled that quite a proportion of deaf mutes become so in consequence of scarlet fever. Nevertheless, the statement cannot be wholly discredited.

Third, Dukes has made the statement that a form of pink-eye may be the only symptom of rubella; that it may produce the ordinary form in another patient, and that it is protective against a second attack of rubella. An epidemic of pink-eye, affecting ten pupils, had occurred in the school shortly before the first case of the exanthematous epidemic. Three of these pupils had been subsequently affected.

Fourth, the fact of lamellar desquamation in a large proportion of cases of a disease which was certainly not scarlatina, does more than anything else

to make credible the existence of another eruptive disease. This form of desquamation is the chief diagnostic distinction between the fourth disease and rubella. If it belonged to rubella it would certainly have been noted long before Dukes' observations.

To restate the case: here is a series of cases of an eruptive fever having an incubation of at least two weeks, eight of which peeled in strips, five of which previously had had scarlet fever, and four, and possibly seven, had had German measles.

It is quite possible, therefore, that some of the mild epidemics of so-called scarlet fever occurring in the spring and summer are in reality the harmless affections which now pass under the name of German measles.

The Treatment of Intussusception in Children.—An interesting discussion on this subject before the British Medical Association, at its recent meeting, was opened by HERNAND PITTS (*British Medical Journal*, September 7, 1901, p. 574). The conclusions of his paper were formulated as follows:

1. Try inflation only when the case is seen within a few hours of onset, and is not of a very acute character. In the great majority of hospital cases it is better to open the abdomen at once.

2. Inflation may be tried in certain other cases for the purpose of reducing the main portion of the intussusception and enabling the incision to be made directly over the cæcum.

3. When reduction is found impossible in chronic cases a resection may be generally done through an incision in the ensheathing bowel.

4. In acute cases, and especially if gangrene is present or the condition of the bowel requires its removal, a wide resection should be undertaken as rapidly as possible, and the ends brought outside the abdomen; continuity should be restored at a subsequent operation.

5. In exceptional cases of enteric intussusception resection and immediate restoration of continuity gives the only chance.

He called attention to the fact that he had noticed after abdominal section in young infants, especially when there had been much manipulation of the intestines, that death is often preceded by high temperature and delirium, and takes place within twenty-four hours after the operation. Nothing is found post-mortem to explain the temperature or the death.

The general consensus of opinion of other hospital surgeons who discussed Mr. Pitts' paper was against the employment of inflation or injection, not even excepting the cases in which early recognition of the condition had been possible.

The Pathogenesis of Rachitis.—RUDOLF FISCHL (*Archiv für Kinderheilkunde*, 1901, Heft 6 u. 6) reviews the various theories that have been advanced to explain the etiology of this disease, but regretfully concludes that careful inquiry into the pathogenesis of rachitis has failed to throw light upon the subject. On the contrary, he states, theories that hitherto seemed well-founded upon clinical observation and statistics have been found fallacious. He considers that Stöckler is right in holding that the future theory of rachitis must be founded upon cellular pathology and biology.