

departure. A large amount of literature has accumulated on the subject of erysipelas of the pharynx and larynx, but our ideas on this subject have been clarified since we recognized the streptococcus erysipelatis as the cause of erysipelas. If, as seems likely to be the case, the streptococcus pyogenes—the cause of various septic affections such as phlegmonous erysipelas—is proved to be identical with the streptococcus erysipelatis, the whole subject of erysipelas of the throat will be much simplified. I am strongly in favour of the view propounded by Dr. Semon, that erysipelas, phlegmonous pharyngitis, angina Ludovici, and similar conditions are only modifications of the same process, differing in their virulence or place of development. I have discussed the subject of erysipelas of the pharynx and larynx in a paper presented at the meeting of the British Medical Association in 1891,¹ so that it is unnecessary for me to say more on the subject on the present occasion.

ABSTRACTS.

DIPHTHERIA, &C.

Cuno, M. (Frankfort).—*Two Years' Diphtheria Serumtherapy.* "Deutsche Med. Woch.," 1896, No. 52.

OF 483 cases of diphtheria, 282 were grave, 112 moderate, 89 light cases. The mortality was 51 (equal to 10·5 per cent.); or if the moribund and those with other diseases are excepted, 34 (equal to 7 per cent.). From 1889 to 1894, the mortality was 32 (equal to 43·8 per cent.); 125 cases had laryngeal stenosis; of these, in 71 cases the stenosis disappeared under the use of serum. Of 51 tracheotomies, 17 (equal to 31·5 per cent.) died. In 76 cases cardiac weakness was observed, and in 60 cases paralysis. *Michael.*

Hammer (Heidelberg).—*Further Experiences in the Treatment of Diphtheria with Behring's Heilserum.* "Deutsche Med. Woch.," 1896, No. 51.

OF 112 cases, in 87 Loeffler's bacilli were found, 17 died, 60 per cent. The author recommends this treatment. The paper is a paradigm of the manner in which the statistics are treated to prove the advantage of serum treatment. Without serum the mortality decreased since 1891, 67 per cent.; 1892, 50 per cent.; 1893, 52 per cent.; 1894, 41 per cent.; 1894 (second half), 1895, with serum, 25 per cent.; 1896, with serum, 17 per cent. These numbers, which only prove that since 1891 the mortality has decreased, without and with serum, are used to prove the efficacy of this treatment. But of the mortality of those who are injected the first days of the disease, 12 of 52, 23 per cent., and 3 of 27 injected later, 11 per cent., the author says that the numbers are too little for any conclusion. *Michael.*

The Quality of Antitoxin used in America. "Med. News," Dec. 19, 1896.

THIS is the result of an inquiry the "Medical News" made into the strength of the antitoxin used in the principal cities throughout America.

¹ "Brit. Med. Journ.," 1892, Vol. I., p. 434.

TABLE I.—SHOWS THE RESULT OF THE EXAMINATION OF NINETEEN SAMPLES

Serum number.	Times tested.	Immunizing units per c.cm.	Number of c.cm. of serum in original flask.	Total number of immunizing units in each flask.
1.....	12	350	10	3500
2.....	14	350	9.9	3465
3.....	6	150	11.2	1680
4.....	10	250 ¹	2.8	700. ¹
5.....	6	70	9.25	647.5
6.....	6	150	9.2	1380
7.....	14	350	18.4	6440
8.....	6	150	4.2	630
9.....	7	50	3.55	177.5
10.....	5	100	9.7	970
11.....	7	Less than 20	3.6	Less than 72
12.....	4	100	9.7	970
13.....	7	100	3.45	345
14.....	13	350	9.1	3185
15.....	8	Less than 50	8.2	Less than 410
16.....	8	70	9	630
17.....	4	100	9.7	970
18.....	4	100	9.1	910
19.....	10	200	9.3	1860

¹ The serum in flask No. 4 was exhausted before this test could be carried higher.

TABLE II.—THE ADVERTISED STRENGTH AS SHOWN ON THE LABELS.

Serum number.	Immunizing units per c.cm. claimed.	Number of c.cm. of serum in original flask. Claimed.	Total number of immunizing units in each flask. Claimed.
1.....	50	Not stated	Not stated
2.....	150	10	1500
3.....	Not stated	Not stated	1500
4.....	Not stated	Not stated	1500
5.....	100	10	1000
6.....	100	10	1000
7.....	"Dose 5 to 30 c.cm."	20	Not stated
8.....	"Dose 5 to 20 c.cm."	5	Not stated
9.....	Not stated	Not stated	1000
10.....	Not stated	10	Not stated
11.....	Not stated	Not stated	1000
12.....	Not stated	10	Not stated
13.....	100	5	500
14.....	Not stated	Not stated	600
15.....	Not stated	Not stated	1500
16.....	20 "estimated"	10	200
17.....	100	10	1000
18.....	100 +	10	1000 +
19.....	100	10	1000

The editor notes that samples of the same manufacturer purchased in different markets showed a wide variation. He believes that this is due partly to a deterioration by keeping and partly to the preservatives used having a weakening effect on the antitoxin.

St George Reid.

Marcuse (Berlin).—*Contribution to Diphtheria Statistics.* Inaugural Dissertation. Berlin, 1896.

STATISTICAL review of the diphtheria epidemics in Prussia from the year 1875 to 1894. Excepting some of the last years, the number of cases increased from year to year. The mortality differed between twenty-two per cent. and thirty-three per cent. *Michael.*

Muller (Berlin).—*Experiments on the Presence of Diphtheria Bacilli in the Mouths of Children in a Large Hospital not affected with Diphtheria.* "Jahr. für Kinder.," Band 43, Heft 1.

OF one hundred children without any symptoms of diphtheria, Loeffler's bacilli were found in the buccal cavities of twenty-seven. In six cases examinations made the first day they were in the hospital gave positive results. Five of these children came of families in which no case of diphtheria had been observed during the last few years. In the sixth child's family a case of diphtheria had occurred, but the child itself was not affected. The cultures of the bacilli in the observed cases were virulent. These cases prove that the diphtheria bacilli cannot produce the disease if a personal immunity exists. *Michael.*

Turner, A. J., and Ashworth, L. N.—*The Value of Antitoxin in the Treatment of Diphtheria.* "Intercolonial Med. Journ.," Oct. 20, 1896.

THIS article is based on observations at the Brisbane Children's Hospital. The protective influence of the serum was proved by the fact that non-diphtheritic cases injected as a prophylactic measure, and who occupied the same wards as virulent diphtheria cases, invariably escaped. The writers point out the not sufficiently appreciated fact that improved methods of diagnosis should show, other things being equal, an increased mortality, and that any lowering of this ratio derives consequently an increased significance. The following tables are given:—

July, 1889, to June, 1891.....	73 cases, 34 deaths.	} Treated without antitoxin.
., 1891, ,, ,, 1893.....	114 ,, 47 ,,	
., 1893, ,, Jan. 1895.....	116 ,, 46 ,,	
	303 ,, 127, or 41·9 per cent.	

Jan., 1895, ,, Sept., 1896..... 83 ,, 15, or 18·1 ,, with serum treatment.

As an explanation of the high mortality of the especially earlier figures, it must be borne in mind that the cases admitted most frequently required operation, as is shown below:—

July, 1889, to Jan., 1895.....	166 operations, 104 deaths, or 62·7 per cent.
Jan., 1895, ,, Sept., 1896	} 37 ,, 13 ,, ,, 35·1 ,,
(in verified cases)	

The authors state further that there was no difference in the character of the disease.

The percentage mortality under the antitoxin treatment is divided into two classes, viz. :—

First period	40 cases, 10 deaths.
Second ,,	43 ,, 5 ,,

The mortality in cases treated during the first four days was practically similar in both, the marked change being in the advanced cases of long duration, which is attributed to the much larger doses of the serum used during the second period. Since the introduction of the antitoxin treatment no cases have developed laryngeal symptoms, and of those admitted with such symptoms the mortality has been reduced to one-seventh of that which previously obtained. The object aimed at has been to inject a sufficient quantity of serum within twenty-four hours to inhibit the

further progress of the disease : in severe cases up to four thousand units (four bottles of Behring's No. 11) within that space of time, in two doses—the first on admission. The antitoxin of the British Institute of Preventative Medicine appears not to have been constant in strength, and so no stated dose is given. All cases cannot be saved even by antitoxin. In the recovered cases convalescence is short and satisfactory. Only two cases of paralysis have been noted since the increased dose has been used. And no toxic effects, with the exception of the "serum rash," were noticed. The authors, after summing up in a most judicial manner, give the preference to Behring's serum. *R. Lake.*

Turner, A. J.—*A Few Notes on the Bacteriological Diagnosis of Diphtheria, and on the Disappearance of the Bacilli during Convalescence.* "Intercolonial Med. Journ. of Australasia," Nov. 20, 1896.

THE cultures were made in Petri dishes and on glycerine-peptone-agar. There is no objection to using a piece of membrane kept for several days, as is shown by the following table :—

Membrane kept	7 days,	diphtheria bacilli	numerous.
"	" 24 "	"	" still present.
"	" 54 "	"	" not found.
"	" 57 "	"	" still "
"	" 61 "	"	" not "
"	" 89 "	"	" " "
"	" 101 "	"	" " "
Swabbing kept	13 "	"	" numerous.
"	" 39 "	"	" a few present.

The various difficulties in culture and diagnosis are gone into, and hints given as to how to avoid failure. As to disappearance of the bacilli during convalescence, in all thirty-four cases were examined, twenty-eight giving negative results from sixteen to twenty-four days after admission, two negative results on the nineteenth and twenty-seventh days, and four on and up to the thirty-seventh day, the thirty-sixth day being the latest date after admission on which they were found. *R. Lake.*

Varnali.—*A Case of Scarlatina, with Diphtheria without Fever.* "Archiv. für Kinderheilk.," 1897, Vol. XXI., p. 358.

A. B., a strong, well-developed boy of three and a half years, took a slight attack of scarlatina on May 21st, 1893. On the 23rd a diphtheritic patch was found on the left tonsil, with swelling of left sub-maxillary and cervical lymphatic glands. The child was drowsy, had no appetite, but the temperature remained normal. The pseudo-membrane spread over the palate, uvula, and pharynx, and a lemon-coloured irritating fluid flowed from the nose; still no fever, and child quite bright and playing about the room. For some time the child coughed up pieces of membrane; the voice, for a little, was rough; and later on the urine contained albumen and red blood corpuscles. Only once did the temperature rise above normal (viz., to 38° C.), and it immediately sank again after a small dose of calomel. *A. J. Hutchison.*

MOUTH, &C.

Colin.—*Treatment of Leptothrix Mycosis with Perchloride of Iron.* "Arch. Int. Laryng., Otol., et Rhin.," Tome IX., No. 5.

AFTER treating a well-marked case of mycosis of the tonsils, tongue, etc., by his ordinary method (application of iodine after evulsion of the fungus) without success,