

penetration of the current a furrow is produced, then an artificial pedicle ; but in cases where the hypertrophy reaches the neighbouring mucous membrane, and is not pronounced, or if there is a smooth surface, and especially a swollen tissue which contracts at the first touch, the loop cannot be used.

The extremity of the turbinateds can also be removed by introducing the snare in front and tightening it from before backwards ; but this method frequently fails, because the metallic thread at the end of the instrument twists easily, thus preventing further diminution. It has also been proposed to insert a needle through the extremity of the turbinated (and Jarvis has had a special needle made), then to apply the wire, so as to prevent its slipping off ; but this method especially is so uncertain that it is little recommended. Galvano-cautery operations and ablation with the scissors meet much opposition, and are not always possible.

Rethi has made an instrument combining the needle and the snare, allowing the operation to be effectually performed at one time—that is to say, to pierce the extremity of the turbinated, and then to tighten the loop.

BIENENSTOCK. *Essay on the Statistics of Nasal Affections and their Consequences.*

The author describes, first, the different nasal affections according to their frequency, then presents statistics according to age, and divides them into eighteen curves, where the frequency of each disease corresponds directly to each age.

These embrace 3547 nasal affections (comprising 11,352 patients) observed during the years 1892-93 and 1893-94 at the laryngological clinic in Vienna. After the curves of chronic hypertrophic rhinitis and chronic atrophic rhinitis, it appears that at Stoerk's clinic catarrhal affections augment notably in frequency at the age of puberty.

Bienenstock insists again upon the influence of puberty in nasal affections ; he also develops a new theory on the etiology of deviations of the nasal septum.

R. Norris Wolfenden.

ABSTRACTS.

DIPHTHERIA, &C.

Armstrong, G. E.—*Antitoxin Fatalities.* “New York Med. Times,” June, 1896.

In an editorial, reference is made to the recent death of the child in Berlin from the use of antitoxin as a prophylactic. Mention is also made of a similar fatality which occurred in Portsmouth, Ohio, and which was reported in a late number of the “Journal of the American Medical Association.” In this journal, also, Struch has advanced the idea that the decrease in mortality from diphtheria, as shown by statistics, since the introduction of the antitoxin treatment, should not be

ascribed exclusively to that treatment. He thinks a very important factor is that the serum-therapy, though not absolutely harmless, is less harmful than the drug treatment formerly used, and favours hydro-therapy as a still better procedure.

A. B. Kelly.

Atwood, C. A. (Taunton, Mass.). — *A Case of Laryngeal Diphtheria; Tracheotomy; Recovery.* "Boston Med. and Surg. Journ.," April 23, 1896.

A CASE of laryngeal diphtheria where tracheotomy was performed on account of the great tracheal obstruction. The treatment consisted of injections of Gibier's antitoxin. The patient made a good recovery in about twelve days. Notwithstanding immunizing injections of antitoxin, all the other members of the family, with the exception of an infant at the breast, were attacked by the disease, but made extremely rapid recoveries. The author sums up strongly in favour of the antitoxin treatment.

St George Reid.

Beauchant.—*Scarlatina and Early Diphtheritic Angina.* "Ann. des Mal. de l'Oreille," Feb., 1896.

THE author thinks that the opinion held by many authorities that diphtheria complicating scarlatina only occurs late or during the convalescent stage is not exact. He thinks that these two conditions are only associated from the commencement. He relates four cases in detail, with bacteriological examinations, in which pseudo-membranous angina was accompanied with scarlatina, the eruption appearing three to four days after the onset of the angina. In two of these cases Loeffler's bacillus was distinctly observed. In his first observation there were three cases of scarlatina in a family where a little girl had presented three days before an angina with false membrane, not accompanied with eruption, which appears to have been clearly diphtheritic. The other cases are not so clear. The author analyzes them very carefully, and deduces the following conclusions:—

1. Diphtheria and scarlatina have relations much more intimate than is generally supposed.
2. Diphtheria may develop secondarily in the course of scarlatina or during convalescence. We see also not rarely scarlatina supervene in the course of a diphtheritic angina, and the two affections may be coincident.
3. In some cases when scarlatina is superadded to diphtheria it may modify profoundly the course of this disease, and even cause the complete disappearance of Loeffler's bacillus.

R. Norris Wolfenden.

Bernheim, P. (Berlin).—*Remarks on the Serum Treatment of Diphtheria.* "Therap. Monats.," June, 1896.

STATISTICS based on hospital results contain so many sources of error that but little reliance can be placed in them. The seemingly wonderful results obtained by serum treatment are more apparent than real.

The author lays no stress on bacteriological diagnosis of diphtheria in this paper, but deals entirely with "clinical diphtheria," as observed by him during the twenty years, 1876-96. Scarlatinal diphtheria and all cases presenting the clinical picture of lacunar or follicular tonsillitis are left out of account. It is quite certain that as diphtheria increases or decreases (both as to number and severity) so does lacunar angina; it is therefore probable that the same influences, that make of the pharyngeal and tonsillar mucous membranes a suitable culture ground for the Loeffler bacillus, also favour the growth of streptococci. Further, it is highly probable that very many of the cases formerly diagnosed "follicular tonsillitis" would now, from bacteriological investigation, have to be considered diphtheria.

The author then proceeds to deal with the alteration that has taken place in the virulence of diphtheria since he first knew it in 1876. His cases fall into three groups:—

1st	from 1876-1880 ...	57 cases with 15 deaths = 26.3 per cent. mortality.
2nd	„ 1881-1886 ...	222 „ „ 46 „ = 20.5 „ „
3rd	„ 1887-1896 ...	135 „ „ 19 „ = 14 „ „

This shows—without serum—a decline in mortality of twelve per cent. within twenty years.

The explanation of this is simple. Every doctor who has been in practice more than fifteen years, and has carefully watched the progress of diphtheria during that time, must be aware that the last eleven years represent the period of decline of a very severe epidemic, during which not only has the number of cases but also the virulence of each attack diminished.

The virulent cases, with purulent, stinking discharge from nose and mouth, that soiled the whole bed of the restless child, and changed the mouth into an ill-coloured slimy surface, and with the glands of the neck, right down to the clavicle, swollen and hard as boards: these cases were then as common as they are now rare. Even in such cases we used sometimes to see—often in a night—all these happy changes occur, which are now ascribed to the action of the serum.

The results obtained from serum treatment by different observers are absolutely contradictory. It raises the temperature, it lowers the temperature; it quickens the pulse, it slows the pulse; and so on. Again, the rapid disappearance of the pseudo-membranes and of glandular swellings in severe cases occurs apart from serum treatment; but far from being a sign to welcome, it is to be regarded as an almost sure forerunner of a rapid, fatal termination of the case.

Serum has no specific action; all the old symptoms appear now as they used to do in the old ever-varying manner.

The author has used the drug only four times. One case was recovering before the drug could be procured; the second recovered no quicker than his brothers and sisters who got no serum; the third recovered, but suffered from a coxitis, first on the right then on the left side, which the author unhesitatingly ascribes to the serum; the fourth died.

Neither clinical experience nor statistics has so far confirmed the hopes that were first raised by serum treatment, and they will be completely destroyed by the outbreak of the first severe epidemic.

Arthur J. Hutchison.

Krückmann (Neukloster). — *A Case of Poisoning by Behring's Serum.*

“Therapeut. Monats.,” June, 1896.

ON 21st January Dr. Krückmann went to the country to treat a patient for diphtheria. The patient coughed violently in the doctor's face. He, therefore, boiled the syringe he had just used and gave himself a prophylactic injection in the dorsal surface of the left fore-arm. A swelling about ten centimetres long by five broad at once appeared. No redness or pain. Half an hour later violent itching of the scalp came on, extending down into the neck, where it became more a prickling sensation. About half an hour later, on reaching home, there came on angina cordis, giddiness, tinnitus aurium, extreme weakness, and staggering. It required great exertion to go to his bedroom and undress. Temperature, 39° C.

The arm gradually swelled up, without, however, being specially painful. Later followed paralysis of the extensors of the fingers. There was no shivering, but extreme turgescence of the skin, so that the face was purple. Next the feet became ice-cold—this extending half-way up the calves—and an itching and

prickling eruption appeared over the whole body (feet only excepted). Skin dry; pulse imperceptible; oppression and distension of abdomen only slightly relieved by vomiting and small normal motions.

Several times faintness was so marked that *exitus letalis* seemed probable. By nine o'clock in the evening this danger was past. Then several beneficial sweatings—each lasting only a very short time—came on, and towards midnight the rash began to disappear. No urine was passed till two o'clock next day (*i.e.*, twenty-four hours, nearly, from time of injection). By three o'clock recovery was far enough advanced to permit of return to work. The following day the lower lip swelled up, and the point of the tongue became more pointed, but only for a few hours.

The patient whom the doctor had injected with the same serum had no unusual symptoms. The day after receiving the injection he was much improved, with no fever, no complications, and wishing to get up. *Arthur J. Hutchison.*

Marsh, E. L.—*Diphtheria Treated with Antitoxin in Glasgow Fever Hospital* "Glasgow Med. Journ.," May, 1896.

The effects of antitoxin treatment in this hospital have been very striking, as is shown in the following table:—

Year.	Admissions.	Deaths (per cent.).
1890	88	39·8
1891	80	38·8
1892	78	37·2
1893	153	40·5
1894	245	35·5
1895	179	14·0

During the year 1894 only nine of the severest cases were treated with antitoxin, but during 1895 all suitable cases were so treated. Along with antitoxin a throat spray of saturated boracic acid solution was used; also in very severe cases a steam soda spray; also whisky or brandy, and during convalescence tonics.

The results in tracheotomized cases were equally good.

Thus the lowest previous mortality under five years old was 77·2 per cent., as against 38·1 per cent.

„ „ „ between five and ten years old was 72·2 per cent., as against 25·0 per cent.

„ „ „ all ages was 76·2 per cent., as against 34·5 per cent.

The returns of the medical officer of health show that these results are not to be explained by any alteration in the type of disease prevailing during 1895.

The importance of early treatment is also brought out:—

Of those treated during first week	15·9 per cent. died.
„ „ „ second „	17·6 „ „
„ „ „ third „	40·0 „ „

Arthur J. Hutchison.

Russell.—*A Review of the Antitoxin Treatment of Diphtheria.* "Birmingham Med. Rev.," June, 1896.

In addition to a lengthy review of statistics that have been published, the author has compiled the following tables of cases occurring in the Birmingham General Hospital:—

TABLE A.
ANTITOXIN CASES, Oct. 11, 1894, to Nov., 1895.

Age.	Cases.	Deaths.	Percentage Mortality.
Under 1	1	1	100
1—2	6	5	83·3
2—3	7	3	42·8
3—4	4	1	25
4—5	7	5	71·4
5—10	15	4	26·3
10—15	10	0	0
15—20	3	1	33·3
20—30	5	0	0
Over 30	1	0	0

TABLE B.

Forty-six cases occurring in five preceding years treated without Antitoxin.

Age.	Cases.	Deaths.	Percentage Mortality.	Total Cases.	Percentage Mortality.
Under 1	2	2	100	2	100
1—2	10	9	90	13	69·2
2—3	7	5	71·4	8	62·5
3—4	8	6	75	11	54·5
4—5	4	2	50	6	33·3
5—10	12	5	41·7	19	26·3
10—15	1	0	0	3	0
15—20	1	0	0	1	0
20—30	0	0	0	0	0
Over 30	1	0	0	1	0

TABLE C.

TRACHEOTOMIES.

Age.	Antitoxin Cases.	Percentage Mortality.	No Antitoxin.	Percentage Mortality.
Under 1	1	100	2	100
1—2	4	100	9	88·8
2—3	4	25	4	100
3—4	3	33·3	7	71·4
4—5	5	60	3	66·6
5—10	4	50	9	44·4
10—15	0	0	0	—
15—20	1	100	0	—

TABLE D.

Day of Disease when Patient admitted.	Antitoxin Cases.	Percentage Mortality.	No Antitoxin.	Percentage Mortality.
1	4	50	2	100 (33·3)*
2	11	0	4	75 (37·5)
3	10	30	5	80
4	8	50	4	50
5	4	50	0	0
6	3	66·6	0	0
7 and over	3	100	4	0

* Figures in brackets denote that doubtful cases are added to undoubted ones, and thus percentage varies.

The author thinks that the death rate of the tracheotomies performed in the cases treated with antitoxin affords the strongest evidence in favour of the treatment.

The following statistics are quoted :—

1.	Mortality before introduction of antitoxin	77·5 per cent.
	" after	" " 52·4 (Körte)
2.	" before	" " 59·5
	" after	" " 48·4 (Metropolitan Hospitals)
3.	" before	" " 79
	" after	" " 34·5 (Marsh)
4.	" before	" " 75
	" after	" " 59·1 (Birmingham)

At the end of this very thoughtful and carefully reasoned contribution to this question, Dr. Russell once more lays stress on this diminution of the tracheotomy mortality, which he considers is the one unassailable piece of evidence that we have before us, and proves antitoxin to be of value. *Barclay J. Baron.*

NOSE, &C.



Baber, Cresswell.—*Notes on the Diagnosis of Latent Abscess of the Maxillary Antrum.* "Brit. Med. Journ.," June 27, 1896.

THE author describes the recognized diagnostic methods, and recommends in doubtful cases puncture through the inferior meatus with Grünwald's trocar and canula. Where no pus appears on aspiration through the canula, he employs Grünwald's method of injecting air and inspecting the middle meatus for discharge of pus. Aspiration may also be repeated after the air injection—a manœuvre which after previous failure may give a positive result, due to the frothing of the pus, bringing the latter to the level of the orifice of the canula.

By tilting the head well back the most dependent part of the antrum may be reached by the canula. Grünwald recommends repeated diagnostic puncture when results are negative and symptoms marked, on the supposition that the cavity at one time contains pus, at another none.

In twenty-six cases the author has never failed to reach the antrum, and has seen no ill results. *Ernest Waggett.*

Fürst, L. (Berlin).—*On the Treatment of Rhagades and Coryza Sicca in Young Children.* "Therapeut. Monatshefte," June, 1896.

DRYNESS of the nasal mucosa and the formation of fine fissures at the orifices of the nostrils are very common and troublesome affections in children. Painting with a one per cent. solution of nitrate of silver will cause any fissures present to heal, but does not affect the dryness of the mucous membrane, so the fissures return again. In young children the result of the dryness of the nasal mucosa is, first of all, that any mucus present is not removed sufficiently, but accumulates, mixed with dust and bacteria, into little lumps and crusts, which may interfere with nasal respiration to a very considerable extent. Further, the mucous membrane loses its elasticity, and even undergoes a kind of atrophy. Older children help the formation of the fissures by scratching inside the nose with their finger-points and nails. Treatment must, therefore, commence with the removal of all crusts, etc., which is best done by washing out with—

Sod. Chlorat.....	0·5
Acid. Boric	1·0
Aq. Dest.	100·0