

REPORT OF FIVE HUNDRED CASES OF INTUBATION OF THE LARYNX.

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It has been my pleasure to have reported, on a previous occasion, 466 cases of intubation. To this number I can now add 37, making a total of 503. Of these thirty-seven cases there were seventeen recoveries, or 46.64 per cent. Many of these cases were beyond all hope when the operation was performed. Several were complicated with scarlet fever and some with measles, and in these cases the operation was simply performed for euthanasia, much to the detriment of a good record. In nine cases antitoxin was administered with six recoveries, or 66.66 per cent. In order to complete the record I desire to publish the following cases:

Case 467.—Diphtheria of pharynx and larynx; age 6 years. Wore tube seven days; complete recovery.

Case 468.—Diphtheria of nasal cavities, pharynx and larynx; age 18 months; patient died within thirty-six hours.

Case 469.—A case of malignant diphtheria with larynx involved. Great relief from dyspnea afforded by the operation, but patient died within twenty-four hours from exhaustion; age 7 years.

Case 470.—Semi-malignant diphtheria of nasal cavities, pharynx and larynx; patient died three days after the operation from exhaustion; age 3 years.

Case 471.—The case was considered to be one of membranous croup, as no membrane was visible in nasal cavities or pharynx. Patient wore tube nine days, making a good recovery; age 3 years; other children in the family developed pharyngeal diphtheria.

Case 472.—Patient died on third day after operation from extension of membrane to the finer bronchi; age 4 years.

Case 473.—Diphtheria of nasal cavities, pharynx and larynx; wore tube ten days; complete recovery; age 16 months.

Case 474.—Patient dying from suffocation when operation was performed; wore the tube four days; perfect recovery; age 20 months.

Case 475.—A case of laryngeal obstruction complicating measles. Operation gave relief to the urgent dyspnea, but patient died from exhaustion within twenty-four hours; age 20 months.

Case 476.—A case of laryngeal diphtheria. Operation gave relief for twenty-four hours, when obstruction occurred below the tube which could not be expelled on removal of the tube. Tracheotomy was done and a membranous cast of trachea and larger bronchial tubes was removed. Patient died forty-eight hours later from bronchial obstruction due to the reformation and extension of the membrane. Age 13 years.

Case 477.—Diphtheria of pharynx and larynx; wore tube four days; uneventful recovery; age 3 years.

Case 478.—A bad case of diphtheria involving the larynx; wore the tube ten days before it could be dispensed with. General paralysis occurred, involving muscles of throat; necessary to feed through stomach tube; slow but complete recovery; age 3 years.

Case 479.—Operation gave relief, but patient died twenty-four hours later from extension of membrane. Age 5 years.

Case 480.—Operation gave relief for forty-eight hours, when obstruction occurred below the tube. The tube was removed, but the patient was unable to expel the offending membrane and immediately became asphyxiated. Tracheotomy was quickly done after respiration had ceased and the patient resuscitated. A membranous cast of trachea and bronchial tubes was removed. The case did well for thirty-six hours, when reformation and extension of the membrane occurred and the patient died; age 5 years.

Case 481.—A case of malignant diphtheria terminating fatally twenty-four hours after operation; age 3 years.

Case 482.—A sister of the previous case; malignant and fatal within twenty-four hours; age 4 years.

Case 483.—Diphtheritic case; wore tube four days; recovery; age 4 years.

Case 484.—Wore tube five days; recovery; age 3 years.

Case 485.—Diphtheritic; died three days after operation from extension of membrane to the finer bronchi; age 11 mos.

Case 486.—Wore tube five days; uneventful recovery; age 8 years.

Case 487.—A diphtheritic case; prompt relief was given, but case terminated fatally within thirty-six hours from extension of membrane; age 12 years.

Case 488.—The case was one of edema of the larynx associated with very severe form of scarlet fever. The patient died from edema of the lungs within twenty-four hours after the operation; age 17 years.

Case 489.—A case of scarlet fever attended with laryngeal obstruction. The case was hopeless when operated upon and died within twenty-four hours; age 3 years.

Case 490.—Wore the tube six days; uneventful recovery; age 5 years.

Case 491.—Wore tube six days; antitoxin administered; good recovery, although slow; a secondary attack of pharyngeal diphtheria occurring within three weeks; age 3 years.

Case 492.—Wore the tube nine days, making a good recovery; age 7 years.

Case 493.—Patient very low with scarlet fever accompanied with laryngeal obstruction. There was but little relief from the operation and the child died within a few hours; age 2½ years.

Case 494.—The patient was very feeble and died within thirty-six hours; age 3 years.

Case 495.—Antitoxin used; patient nearly moribund from asphyxiation; wore the tube four days; recovery.

Case 496.—Patient died within twenty-four hours after the operation; age 3 years.

Case 497.—Diphtheritic case; patient greatly exhausted from difficulty of respiration; antitoxin employed; wore tube five days; good recovery; age 2 years.

Case 498.—Wore tube nine days before it could be dispensed with; antitoxin used; recovery; age 3 years.

Case 499.—A very bad diphtheritic case; patient nearly dead and lower trachea and bronchial tubes already invaded; intubation gave no relief on account of obstruction in trachea and bronchial tubes which could not be expelled; tracheotomy performed and patient died within twenty-four hours; age 2 years.

Case 500.—A bad diphtheritic case, nose, throat and larynx being involved; four other bad cases of diphtheria in the family; antitoxin used; wore tube five days; recovery; age 2 years.

Case 501.—A case of pharyngeal and laryngeal diphtheria and patient greatly exhausted from long continued dyspnea; antitoxin used; wore tube five days; recovery; age 3 years.

Case 502.—A case of laryngeal diphtheria, no membrane being visible in pharynx; child suffering from intense dyspnea; case terminated fatally within thirty-six hours from extension of membrane; age 7 years.

Case 503.—The patient did well for four days, when the tube was removed. Within a few hours the stenosis returned and before reaching the patient death had occurred from suffocation; antitoxin used; age 3 years.

In conclusion, arranging my cases in series of 100 consecutive cases the record to date is as follows:

FIRST ONE HUNDRED CASES.

Age.	No. Cases.	Recoveries.	Percentage.
Under 1 year	5	1	20.00
1 year	13	2	15.38
2 "	22	4	18.18
3 "	17	2	17.76
4 "	15	7	46.66
5 "	9	3	33.33
6 "	5	2	40.00
7 "	8	2	25.00
8 "	4	3	75.00
9 "	1	1	100.00
10 "	1	0	00.00
Total	100	27	27.00

SECOND ONE HUNDRED CASES.

1 year	17	5	29.41
2 years	15	2	13.33
3 "	14	4	28.56
4 "	22	7	31.81
5 "	9	6	66.66
6 "	8	3	37.50
7 "	6	4	66.66
8 "	1	1	100.00
9 "	8	2	66.60
10 "	1	0	00.00
12 "	2	0	00.00
13 "	0	0	00.00
14 "	0	0	00.00
Total	100	34	34.00

THIRD ONE HUNDRED CASES.

Under 1 year	5	2	40.00
1 year	11	2	18.18
2 years	13	5	88.46
3 "	19	11	57.72
4 "	22	9	40.90
5 "	10	5	50.00
6 "	7	1	14.28
7 "	6	3	50.00
8 "	2	0	00
9 "	2	0	00
10 "	1	1	100.00
20 "	1	0	00
43 "	1	1	100.00
Total	100	40	40.00

FOURTH ONE HUNDRED CASES.

Under 1 year	2	1	50.00
1 year	11	3	27.27
2 years	20	7	35.00
3 "	19	10	52.63
4 "	20	7	35.00
5 "	11	4	36.36
6 "	5	1	20.00
7 "	5	1	20.00
8 "	3	2	66.66
10 "	2	1	50.00
11 "	1	1	100.00
60 "	1	0	00
Total	100	38	33.00

LAST ONE HUNDRED AND THREE CASES.

Under 1 year	2	0	00
1 year	14	3	21.42
2 years	16	10	62.50
3 "	29	11	37.93
4 "	14	6	42.85
5 "	7	2	28.56
6 "	2	1	50.00
7 "	7	1	14.28
8 "	4	3	75.00
9 "	1	0	00
10 "	2	1	50.00
12 "	2	0	00
13 "	1	0	00
17 "	1	0	00
36 "	1	1	100.00
Total	103	39	38.83

TOTAL NUMBER OF CASES.

Under 1 year	15	4	26.66
1 year	76	16	21.05
2 years	97	35	36.08
3 "	114	48	37.89
4 "	104	41	39.42
5 "	50	21	42.00
6 "	28	8	28.57
7 "	36	11	30.55
8 "	17	11	64.70
9 "	8	3	37.50
10 "	9	4	33.33
11 "	1	1	100.00
12 "	5	0	00
13 "	2	0	00
14 "	1	0	00
17 "	1	0	00
20 "	1	0	00
36 "	1	1	100.00
48 "	1	0	00
60 "	1	0	00
Total	503	178	35.38

I can not close this paper without emphasizing the importance of the use of antitoxin in cases of laryngeal diphtheria. I am fully convinced that antitoxin limits the extension of diphtheritic exudation as does no other remedy that we possess and as the danger lies chiefly in the extension of this membrane it is apparent that the remedy should be employed early before the membrane has extended to the lower trachea and to the bronchial tubes. In a case of diphtheria, the very moment that it is evident from the slightly embarrassed respiration and croupy cough, that the larynx has become invaded the remedy should be used. By the early use of antitoxin in these cases not only will many operations be avoided but many cases requiring operation will be saved that would otherwise perish. In corroboration of this statement I would say that since the general use of this remedy in Denver I have been called much less frequently by my *confrères* to operate than formerly, and in those cases operated upon a much larger percentage have been saved.

THE EMINENTLY SCIENTIFIC NATURE OF OUR PATENT AND COPY- RIGHT LAWS.

THE KLEBS ANTIPHTHISIN CASE.

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For the purpose of promoting progress in science and the useful arts the Constitution of the United States gives Congress the power to grant to authors and inventors for limited times the exclusive use of their respective writings and discoveries. On the clause in the Constitution referred to, our patent and copyright laws are based. The question at issue is the right to copy. The copy right law refers to the right to copy the writings of others; while the patent laws refer to the right to copy the inventions of others. Now I propose to show that it is just as equitable for the medical profession to endorse the patent as applied to medicine, as it is to endorse the copyright as applied to literature. At the same time I hope to make it clear that so-called "Patent" medicine business is a misnomer; and I hope to show that what is generally known as the "Proprietary" medicine business possesses no property in medicines whatever, and is a misnomer likewise.

All will admit that the promotion of science and the useful arts is of great benefit to society at large, and any fair minded man will agree that capital invested in business should be properly protected. If, therefore, there is a law which will protect both science and commerce at the same time such a law must be truly beneficent. Such exists in our patent law, which, if properly applied is capable of effecting that most desirable end.

"A patent is a contract between the inventor and the government representing the public at large. The consideration moving from the inventor is the production of a new and useful thing, and the giving to the public a full knowledge thereof by means of a proper application for a patent, whereby the public is enabled to practice the invention when the patent expires. The consideration moving from the government is the grant of an exclusive right for a limited time, and this grant the government protects and enforces through its courts." Simond's Manual of Patent Law, p. 11.

The patent office at Washington is a great bureau of archives representing progress in science and the arts in the United States. Any one who wishes to post himself in regard to inventions in any special line of work can obtain full knowledge of everything patented in that line by applying at the patent office. Models, drawings, descriptions, working formulas, are all there for inspection; and he can secure, at small cost, copies if he so desire.

Many useful arts of the ancients have been lost to the world for lack of publication which would have been preserved if patent laws similar to those devised by our law makers had been in force. The necessity of securing the publication of the art of manufacture of every medicine must be apparent to every one. In case of a *patented* medicine such publication is secured. Moreover, the inventor, to whom the world is indebted for the discovery of a new and useful thing receives well merited reward for his labor.

The patent law provides "That any person who has invented or discovered any new and useful art,