operators, but in much greater degree by the additional fact that most of them were simply operations of last resort. And from this, we may again infer that a fatal tendency often attaches to uterine myomata. The results of hysterectomy during this period are not at all surprising when we recall that the death rate of ovariectomy was almost as great when it occupied a similar position as a last resort procedure. The great fatality of the operation, which prevailed until lately, explains also the eagerness with which any palliative means of treatment was welcomed by surgeons, and the exaggerated praise accorded to it in every supposed case of success.

Since 1885, and especially during the past two or three years, the operation has made very rapid progress in point of success. While it had a fatality of thirty-three per cent. five years ago, now the proportion of failures has become so small in comparison, that the advisability of hysterectomy in any given case has become an entirely different question. The percentage of success that is attained at the present time can only be approximately determined.

My own cases of hysterectomy are too few in number to be of the least value, so far as their percentage of deaths or recoveries is concerned. My last six in succession have recovered. Looking back over the failures of my earlier work, and seeing how many of them were due to preventable causes, I feel very certain that in the future my unfavorable results after hysterectomy will not exceed ten per cent. Dr. Homans has recently reported ten successive recoveries.

In a total of about one hundred cases, Dr. Bantock has had not far from a ten per cent. loss. His later operations, I believe, give a mortality considerably less than this. On the whole, it is probable that ten per cent. approximately represents the present mortality of the operation.

Again recurring to the many dangers that attend the large interstitial and subserous fibromata, and recalling the many ways in which they kill, and especially (of the several degenerations to which they are liable) those of malignant character, that Dr. Martin found in twenty per cent. of 186 cases, I feel warranted in insisting that hysterectomy, which entirely cures nine out of every ten of the patients, is urgently indicated. I claim, too, that apart from the dangers mentioned, the operation, with its present small fatality, is perfectly justifiable for the cure of the hopeless physical and mental suffering that these large tumors often inflict. When its mortality is still further decreased by its prompt employment, and, by the consequent elimination of many cases that have become desperate by delay, abdominal hysterectomy will take its place among the great surgical procedures of the half-century, second only to ovariectomy in its brilliant success.

— A correspondent writing to an English contemporary throws a light upon the dark side of the subject of purchasing medical practices, when he says: "About nine months ago I bought a practice, which, to say the least, has not turned out altogether an unqualified financial success. When I mention (with a blush) that one of the names given to me belonged to a patient who died four years ago, and that several others had been previously, as I subsequently ascertained, handed over to a neighboring practitioner, it will be readily understood that it was not the practice alone that was sold."

ADENOID GROWTHS IN THE NASO-PHARYNX: RESULTS OF THEIR REMOVAL IN SEVENTY CASES OF MIDDLE-EAR DISEASE.

BY FREDERICK L. JACK, M.D.,

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THE importance of nasal and post-nasal obstructions in their relation to diseases of the middle ear has recently received careful consideration in the admirable paper of Dr. Franklin Hooper on "Adenoid Vegetations in Children," and also in the article written by Dr. Clarence J. Blake on the "Relation of Adenoid Growths in the Naso-Pharynx to the Production of Middle-Ear Disease in Children." In reading a brief report of seventy cases, I offer nothing original, but wish to emphasize what has already been said as to the encouraging results obtained by removal.

For the opportunity of operating on many of the patients, I am indebted to the aural surgeons of the Infirmary. Observations on these, together with private ones, extending through a period of eighteen months, warrant the belief that the relief from ear trouble in many is permanent. A hundred or more children were examined for adenoids, and if found in small amounts and soft, attempts were made at their removal with the finger. These cases have no value in statistics. I regret that notes of these were not made for comparison with those receiving more thorough interference.

In only a few of the seventy cases was nasal breathing especially interfered with. A number were heavy breathers from obstruction of the nasal passages by the growths, but in a few, the condition of the drum membranes or the middle ear, aroused the first suspicion of post-nasal growths. That even a small amount of vegetations is frequently found in children suffering from deafness and otorrhœa, or both, is a frequent experience. If these cause or aggravate the ear trouble, in what way do they act? Is it mechanically by pressure near the orifice of the Eustachian tubes, preventing their opening, or is it rather by the changed direction of the inspired air, preventing the normal interchange of air with the middle ear, or is it by inflammation of the tubes by extension from the pharynx of a catarrh induced by the growths?

In spite of what has been written, the importance of the relation between the vegetations and ear diseases seems not to be appreciated by all. Let me briefly cite the following case as a rare example of the distressing condition induced by these tumors:

T. A., age five, was brought to the Infirmary in July, 1888, for deafness. Examination showed the drum membranes reddened and completely collapsed. The hearing power for the voice was very defective, and not improved after attempts to inflate the ears. The mouth was wide open, and the lips cracked and bleeding. Breathing through the nose was impossible. This condition was of a year's duration, and had caused the patient many sleepless nights and the parents much alarm. All the symptoms described by various writers on this subject were painfully exaggerated in this child. The post-nasal space was found, on examination, completely filled with growths. Operation was performed in July, 1888, and though rather long, nothing unusual happened. Immediately after the operation she could blow through the nose and could also use it for breathing. On inflation a day or two after, air entered the middle ears freely. Low

voice was heard at sixteen feet. She made an uninterrupted convalescence.

March 24, 1890, nearly one year and nine months afterwards, the mother reports the child's condition as excellent. Has had no trouble about hearing, and only at times, while suffering from a cold, has the breathing been interfered with.

FIG. 1. From a photograph taken just before the operation, the child holding her breath. FIG. 2. From a photograph taken one year after the operation.

Of the seventy cases operated on, forty-three were males and twenty-seven females. The ages varied as follows:

Under five years	7
Five to ten years	41
Over ten years	22
Total	70

The diseases of the middle ear were the following:

Otitis catarrhalis mucosa chronica	20
" " serosa "	8
" media acuta simplex	18
" " suppurativa acuta	6
" " " chronica	15
" " " cum gran- ulatione tympani	3
Total	70

The instruments employed in operating were Hooper's modification of Löwenberg's forceps, but with larger blades, a rubber palate retractor, and the O'Dwyer mouth-gag. Patients were completely etherized and placed in an upright position.

In regard to sequelæ, it may be well to mention that seven experienced a sore throat after the operation, but in three only was it serious enough to cause discomfort. Of the seven, three had acute otitis. I experienced no trouble from hæmorrhage, although at times it seemed a good deal. Drs. Bryant and Plummer kindly assisted in most of the operations.

It occurred to me to note the situation of the growths in relation to the kind of ear trouble. In fifty-one cases the vegetations were located chiefly on the posterior wall of the pharynx. Of this number, forty-six had non-purulent otitis. In nineteen the development was more extensive in the vault, and was associated with purulent disease in ten. From this it would appear that the location of the growths had little to do with the nature of the ear disturbance. In forty-four cases both middle ears were affected, fifteen experienced trouble in the left only, and eleven in the right ear. Among the number were two deaf mutes. In the case of one the growths offered an almost com-

plete obstacle to the entrance of air through the Eustachian tubes. This the operation entirely removed, and the ears could be inflated with ease. Improvement in hearing was hardly expected, for in this case, as in the other, the labyrinth was already affected. I might mention incidentally that there was nervous twitching in one of the mutes, which suggested chorea. This quite disappeared after the operation, and when last seen, nine months afterwards, was barely noticeable. The faucial tonsils were hypertrophied in seven cases, and removed in two.

In considering the question of recurrence, I regret that the opportunity of subsequently examining the seat of operation was limited to a very few of the cases. Two subsequently returned for a second operation. Most writers, however, concur in the opinion that recurrence is due to want of thoroughness on the part of the operator to completely remove the growth.

In obtaining results, printed questions were mailed to the parents, and in most cases answers were received. Of those from whom no replies were received, the notes made at their last visit were depended on.

In cases of frequently relapsing ear trouble, it was expected of the operation to prevent recurrence. In the more acute cases, some improvement could be expected from treatment directed to the ears alone. In these cases, too, the operation was performed with a hope of preventing subsequent relapses of the ear trouble.

For the sake of easy comparison, we will classify the diagnosis of the ear into purulent and non-purulent otitis. The following tables show the kind and, as nearly as possible, the duration of the ear trouble:

PURULENT OTITIS.

One month or less	6 cases.
One year	3 "
Two years	5 "
Five years	1 case.
Total	15

NON-PURULENT OTITIS.

One month or less	19 cases.
Four months	1 case.
Eight months	1 "
One year	3 cases.
Two years	13 "
Three years	15 "
Four years	1 case.
Five years	2 cases.
Total	55

Considering the twenty-five cases of one month or less as acute cases, there have been but two cases of recurrence of otitis. Both of these were of the purulent variety. In one the ear remained healed eight months, when relapse followed an attack of influenza, the other was caused by whooping-cough. The results obtained in all of the cases is shown in the following table, which gives the time during which it is known no relapses have occurred:

PURULENT HEALED.

Two weeks	2 cases.
One month	4 "
Two months	1 case.
Four months	1 "
Eight months	1 "
Eleven months	1 "
Diminished otorrhœa	2 cases.
No improvement	2 "
Unrecorded	1 case.
Total	15

NON-PURULENT HEALED.

One to three months	23 cases.
Four months	1 case.
Eight months	2 cases.
Ten months	6 "
Eleven months	4 "
Twelve months	6 "
Twenty months	4 "
No improvement	7 "
Unrecorded	2 "
Total	55

The cases, I admit, are few to draw conclusions of great value from, still the long period of relief in many of the cases, whose previous history tells of frequent relapses, makes me think that much may be expected from the operation. It will be noticed that the results were somewhat better in the non-purulent than in the purulent, although the number of cases of the latter class is comparatively few. Decidedly favorable reports of the breathing were received in nearly all the cases. A few, however, had obstinate nasal catarrh, which made breathing still difficult. The results certainly show the benefit to be derived from the operation, and also gives us ground to believe that the patients will continue free from relapse.

APPENDICITIS: OPERATION, HERNIA, RECOVERY.¹

BY C. ELLERY STEDMAN, M.D., DORCHESTER.

J. P., aged nineteen, for many years was an undersized boy, but latterly had begun to grow, and was in good health. In June, 1882, he had an attack of appendicitis, for which I attended him. His symptoms were severe, and I had the benefit of Dr. Edes's opinion in consultation. I do not remember that at that time there was any question of operation. He made a good recovery in three weeks.

He was in a store in the city, when, on Saturday the 2d of February, 1889, he was seized with abdominal pain in the morning, and went to bed with it in the evening. Domestic remedies not availing, I was called in the afternoon of the 4th. He was sure he had had no chill. There was severe pain in the right iliac fossa, where slight dulness could be felt. There had been no defecation for two days, and to-day he vomited. Examination by rectum revealed a swelling, slight and soft, which could just be reached by the finger. His temperature was 102° and his pulse 104. Under treatment, the next three days the temperature retreated to 98 and 99°, and the pulse to 92 and 72, both generally less in the evening than in the morning; but the pain and vomiting increased. There was no movement of the bowels; the belly grew more swollen and tympanitic, and the countenance became pinched and anxious. These symptoms made me ask for a consultation. Accordingly, Drs. Fitz and Bolles saw him on Thursday, the fifth day of his illness. Then no sharply defined sensitive spot could be made out. Rectal examination gave pain, and a doughy sensation high up.

The next day there was no decided change; and the consultants agreeing with me on the necessity of operation, it was proceeded with on the seventh day (February 9th).

The treatment had been hot fomentations, and twenty drops of elixir of opium every three hours; when called for, as much milk and lime-water as he could take without nausea.

On the seventh day, after etherization, a sense of circumscribed resistance could be felt per rectum at the brim of the pelvis—none elsewhere. The account of the operation kindly furnished by Dr. Bolles is appended.

"The abdomen was moderately swollen and tender, especially tender in the lower part. There was no induration to be felt in the right iliac region, and not much more tenderness than in the hypogastrium, for instance. There was a little rather doubtful increase of dulness above Poupart's ligament on this side. Through the rectum a soft elastic tumor, that felt like a distended portion of intestine, was discovered, also a little to the right of the promontory of the sacrum.

"An oblique incision, four inches or more in length, was made an inch above the right Poupart's ligament and a little further towards the side. It was continued through the muscles, and down to, but not through the peritoneum. Then lifting the peritoneum from the psoas muscle, abscess or induration was sought for without success. After this it seemed best to explore the mass that was felt through the rectum; and without opening the peritoneum it was separated by the fingers from the muscles and great vessels until an opening over the brim of the pelvis finally reached it: an exploring needle and aspiration showed it was what it appeared to be—merely a coil of distended bowel—and that course was abandoned. Then I returned to the supposed site of the appendix, and scratching through the softest part of the peritoneum exposed, broke into a cavity containing a tablespoonful of stinking, shreddy liquid, and the swollen, ruptured appendix. The abscess wall was formed by the adhering surfaces of several coils of intestine, and as they were covered by only very recent lymph not much stronger than fresh curd, I did not dare to manipulate them much nor try to remove the sloughing appendix. So I washed the cavity and entire cut very thoroughly, put in two drainage-tubes, one into the abscess and one into the deep exploration, and sewed the skin and muscles together excepting where the tubes projected."

The patient seemed little relieved by the operation, and was very restless, but the temperature did not rise higher than 101°, and the pulse kept good. The pain and tympany continued; there was no movement of the bowels; milk, opium, and whiskey were given by enema.

The next (tenth) day, he was restless and delirious at times; there was no defecation; and the alimentation and medication by rectum was continued. The highest temperature was 101.6°

It would be tedious to carry out the daily record. Emaciation became extreme; pain, delirium and enormous distention of the abdomen increased. The discharge was considerable at first, then decreased till the carbolyzed douches through the tubes returned clear. The stitches promised to hold well, but the wound grew sloughy, and one stitch after another gave way. Then there presented in the middle of the wound a knuckle of intestine as large as a hen's egg, which looked as if it would burst. Under these conditions it seemed as if life could not hold out, and the only encouraging symptoms were the pulse and tem-

¹ Read before the Boston Society for Medical Observation, April, 1890.