of these cases, following suprapubic operation, have been reported by Casper, Lichtenstern,¹⁷ Zuckerkandl and others, whereas this condition seems to develop less frequently after the intravesical operation, one case only being reported by Asch. As stated before, however, details are so scanty and after-results are lacking in the reports of so many operators that no definite opinion can be formed on this point.

The results of these reported intravesical operations, numbering something over 200 cases, may be summarized as follows: Mortality, one half of one per cent, or less, there being but one fatal case in the whole number; hemorrhage, severe enough to require control by suprapubic cystotomy in 3 cases; cure for at least three years has been established by cystoscopic examination in 50% of the cases reported by Weinrich. The exact per cent of cures cannot be figured at present, owing to the failure of the operators to confirm an apparent cure by cystoscope. For this same reason, the frequency of recurrence after the intravesical operation cannot be estimated from the reports. In the original statistics of Nitze, the recurrences are given as 18%, which is better than the figure stated by Rafin in his collected statistics of suprapubic operations, which was 26%.

Inasmuch as Nitze operated on tumors of all sizes, while the tendency at present seems to attack only the smaller benign growths, it is probable that there is a still greater difference in favor of the intravesical operation in per cent of recurrences.

In conclusion, we may say that the published results of intravesical operations do not at present warrant the adoption of the method for the removal of primary growths except in cases of very small tumors or in patients in whom a suprapubic cystotomy under an anesthetic is contra-indicated. In cases of repeated recurrences after suprapubic operations, the method is to be recommended over the performance of frequent suprapubic operations.

My personal experience with the intravesical operation is limited to one case which I shall briefly report.

A man (G. R.) aged sixty-one was operated on by Dr. Cabot in 1906 for a large papilloma on the left wall of the bladder. Recent glycosuria cleared up before operation. Suprapubic cystotomy was done and the tumor cut away from the bladder wall with the actual cautery. Patient made a good recovery, but in the winter of 1908 hematuria returned and a recurrence of the growth was seen with a cystoscope. In March, 1908, second suprapubic cystotomy revealed several large papillomata growths in both lateral and posterior walls of bladder. These were removed as before. Patient was well, without further bleeding, until the spring of 1910, when he had one or two brief attacks of hematuria. On Dr. Cabot's invitation, on June 25, 1910, I cystoscoped the patient, finding a rough, pinkish, oblong mass at the top of the bladder, apparently in the suprapubic scar. I introduced Young's cystoscopic rongeur, under cocaine, and with 4 oz. of boric solution in the bladder was unable to reach the growth, largely, I think, on account of the

moderate enlargement of the prostate gland. On my drawing off about half of the solution and pressing down on the suprapubic scar, the growth was grasped in the jaws and a piece amounting to about one third of the whole mass was removed. Separation of the portion caught in the jaws of the instrument was difficult and required a rather vigorous pull before it came away, which was painful. There was moderate bleeding, enough to cloud the medium and prevent further attack on the tumor. There was only slight tingeing of blood in the urine for the next twenty-four hours and no reaction. About ten days later, second attempt was made, which succeeded in removing two small fragments only. On inspecting the bladder wall before attacking the tumor, a couple of small papillomata were seen on the left side of the fundus near the left ureter. Following the operation, the patient went away on a vacation, and was apparently free from bleeding for some time. I had hoped to remove the remaining growths at further sittings, but the patient, in September, had a slight hemiplegia, and soon after, attacks of hematuria recurred, confining him to bed.

Soon after this the glycosuria returned, and uremic symptoms developed. His physician recently informed me that the hemiplegia became complete, and death shortly followed. Towards the end, the hematuria was severe, and injections of resorcin into the bladder were without effect.

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THE EXAMINATION OF THE NOSE AND THROAT IN RELATION TO GENERAL DIAGNOSIS: RESULTS IN ASTHMA FOLLOWING NASAL OPERATION.*

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IN a consideration of the relation between nose and throat affections and other diseases which are met by the general practitioner, two facts must be kept in mind; first, that the patient's general condition affects the mucous membrane of the nose and throat, and, second, that abnormal nasal conditions affect the general health. It is well known that the nasal mucous membranes are more or less abnormal in every affection which impairs the general health. On the other hand, there are undoubtedly many cases in which the poor general condition is at least in part due to

* This paper is written from the viewpoint of one who is interested principally in medical and surgical diagnosis, and, therefore, it lacks the merit of technicality which might be given by the rhinologist.

unrecognized trouble in the nose and throat. We willingly look upon diseased adenoids and tonsils as harmful, but we do not seem to be so much awake to the fact that other nasal conditions are nearly if not quite as important. Even though prejudice exist in the matter, this should not be an excuse for failure to examine the nose and throat as is often the case. That affections of the nose and throat are not being carefully considered is constantly brought to one's attention. A patient with pronounced nasal symptoms may have visited a dozen physicians, none of whom has examined the nose nor suggested an examination. Meanwhile "catarrh" remedies make fortunes, and the cocaine habit increases. That affections of the nose and throat are credited with an effect out of proportion to their real significance is also true, though this is not done so often by general practitioners.

The specialist who is tempted to jump to the conclusion that nasal disorders can cause everything in all degrees of severity should protect himself by accepting the opinion of those who deal intimately with general treatment. Evidence must be weighed after a general physical examination has been made before deciding upon the significance of any existing nasal condition. The specialist who completes the toilet of his "hundred patients a day" by means of sprays and nebulizers is doubtless filling a popular demand, but he is also a purveyor of mental suggestion in a manner which has little to commend it.

By nasal treatment one would better mean the mechanical removal of diseased parts, or obstructive parts, and the drainage of confined pus; i. e., the removal of polypi or hypertrophied turbinates which obstruct breathing, and the drainage of sinuses; and this for the most part by clean-cut surgery. Treatment doubtless has its place, but should be much restricted.

I shall review in a general way a number of conditions in which nose and throat examinations more particularly suggest themselves, or in which nasal treatment has proved efficacious; and in closing will give some statistics relative to asthma.

The complaints of nasal discharge, of deafness and of nasal obstruction are so often heard and so easily elicited that one would hesitate to consider them were it not for the fact that the physician generally dismisses the matter with a passing remark concerning the frequency of "catarrh," and, strangely enough, the patient seems satisfied. These complaints should be heeded and a careful nasal and aural examination made in order to determine just what may be expected from nasal operation or treatment. Polypi, antrum disease or hypertrophied turbinates may be the cause of the "catarrh."

Acute headaches with fever, no matter to what part of the head the pain may be referred, are often due to sinusitis. The headache is often intense and one may suspect the onset of a severe general infection. Many times when grippe is diagnosed, whether the influenza bacillus is concerned or not, the severe symptoms are relieved upon drainage of an antrum or frontal

sinus. Indeed, this is often a more urgent matter than drainage of pus from other parts of the body.

Dull, heavy headaches of a more constant and chronic type, sometimes confined to one side of the head, are quite often due to nasal obstruction or sinusitis. In these cases the turbinates may be hypertrophied or polypoid, and local treatment or operation may be advisable according to the nature of the condition found.

Periodical headaches, or sick headaches, are generally of nervous origin, and nasal operation should be advised only when more serious nasal trouble is found. Something can be learned from examination of the nose during an attack. Even in this type of headache, however, considerable relief, particularly in the severity of the attacks, follows operation in properly selected cases. Indeed, we believe examination of the nose and throat in the various forms of headache to be more important than the examination of the eyes; yet in most of our cases the eye condition has been previously corrected, while the nose and throat have been almost entirely overlooked.

The association of headache or nasal obstruction with the onset of the patient's complaint, particularly if the complaint be a periodical one, makes us suspect nasal disorder. This is observed in several conditions. Asthma, epilepsy, dizziness and various stomach and digestive disorders of a milder type are frequently associated with headache. The headache is generally the resultant, in these cases, but occasionally it would seem to be the antecedent, and if so one must consider the possibility of nasal influence. Especially have we seen benefit from operation when there is a complaint of morning nausea and vomiting associated with headache, if the patient does not impress one as being markedly neurotic. Many patients complaining of dizziness associated with nasal obstruction or headache have been relieved. The epileptic should have the same careful examination that is required in cases of headache, including the eye, nose and throat. One does not expect cure of epilepsy to follow operation, but frequently improvement has been observed. Cases certainly should not be operated upon unless decided trouble is found.

The effect of chronic fibroid tonsils upon the recurrence of articular rheumatism and other diseases of the rheumatic cycle should be considered. Cases of chorea will often improve more rapidly after tonsillectomy.

The relation of tonsillitis and sinusitis to the more chronic types of arthritis is indefinite and requires more study.

More particularly must one emphasize the importance of a careful search for all possible causes of severe anemia. Anemia of itself will cause intumescent turbinates and an edematous condition of the nasal mucous membranes. This must be interpreted as secondary. But, on the other hand, an antrum full of pus will make it difficult to improve the blood. I have seen anemics improve rapidly after drainage of an antrum when placed upon the very treatment which had formerly failed.

Patients with facial neuralgia have been operated upon several times before an antrum full of pus was discovered, the pain promptly disappearing after proper drainage.

Tumors of the face and neck, including goiter, should have nose and throat examinations for diagnostic purposes. A few glands high up near the angle of the jaw, even if they are quite large, may disappear rapidly after tonsillectomy. With tuberculous glands of the neck, the tonsils are usually in bad condition, and sometimes it seems best to remove them. In goiter, paralysis of a cord may be present even though no hoarseness exists, and if this be not discovered before thyroidectomy, the surgeon is unjustly blamed. One occasionally sees a cyst in which malignancy has been suspected correctly diagnosed as abscess of the antrum by means of nasal examination. Tumors of quite similar characteristics are found upon nasal examination to be sarcomata of the antrum. Cases long treated as ulcerated tooth prove to be abscess of the antrum.

It need hardly be mentioned that mediastinal growths and thoracic aneurysm often cause paralysis of a vocal cord, generally the left, occasionally the right, and that the patient is sometimes referred from the nose and throat department for general examination. It is not so well-recognized, however, that an apical lesion of the lung may cause paralysis of the right vocal cord.

It is well to know the nose and throat findings where lues is suspected. The diagnosis is often very easily confirmed in this way and occasionally a doubtful case is entirely cleared up. A luetic perforation of the bony septum is easily overlooked. One must be careful, however, not to diagnose every perforation of the septum as syphilitic. Some are traumatic, others trophic or tuberculous, but these are generally perforations of the cartilage.

Irritative cough, especially night cough, may be entirely a reflex matter, and sinusitis may be found. This leads directly to a consideration of certain forms of asthma which are apparently influenced by nasal conditions. Our experience with nasal asthma has been moderately encouraging. Every asthmatic is referred to the nose and throat department in the course of routine examination, and selected cases are operated upon; that is, cases which show polypoid growths, sinusitis or hypertrophied turbinates, which clearly cause nasal obstruction.

During the year 1909, 66 cases of asthma were operated upon by Dr. Justus Matthews, in the clinic of St. Mary's Hospital. In 35 cases turbinectomy was done; in 26 of these, double middle turbinectomy; in 10, one or both inferior turbinates were also resected. This was the operation of greatest frequency. In 12 cases polyps were removed. In 9 one or both antrums were drained, and in 6, deformities of the septum were corrected. Four cases were in children, and adenoids and tonsils were removed.

In the general examination of these patients there did not appear to be any distinction between

the different types of nasal affection discoverable in the symptoms, or signs of the asthma. After operation the patients were placed upon small doses of iodide for two or three weeks, as is customary after nasal operations.

Reports have been received from 52 cases, nine months to one and one-half years after operation. Two have since died of unrelated affections. Two are worse than before operation; the attacks are more frequent and more severe and the general health is worse. Thirteen can see no definite change in their condition. The frequency of attacks may be diminished and the severity increased, or vice versa, but they cannot report themselves as better or worse. Thirty are definitely much improved, both as to frequency and severity of attacks, and in their general condition. Five consider themselves cured, which, of course, only means that they have had no attacks since operation. One of these patients had had asthma for twenty years, another for sixteen years.

In other words: Definite improvement has followed in 57%, and "cure" in about 10%.

On tabulating the results, one finds that, in general, when the attacks become less frequent, they also become less severe. The general health had improved in 33 of the 52 patients. Headache had been a symptom in 31 cases and had improved in 24. Mild stomach symptoms were elicited in 25, and had improved in 20.

Of the operations upon the 5 patients who were "cured," 4 were turbinectomies, and 1 the removal of polyps.

Improvement followed in 3 of the 4 cases in children in which adenoids and tonsils were removed.

The most unusual things will occasionally cure asthma. Looking upon the condition as a spasmodic neurosis, one would, however, expect strange cures. In reality one should not strive for cures only, but should be satisfied with any procedure which will cause improvement in the majority of cases. Nasal operation seems to do this if the patients are properly selected. And there would seem to be good logic in freeing the respiratory tract of anything which might cause reflex irritation.

In conclusion, it may be reiterated that examination of the nose and throat for diagnostic and therapeutic purposes should not be neglected. On the other hand, these are not parts of the anatomy to be needlessly tampered with simply because they are accessible. Like the gynecologist, the nose and throat man may court distrust by overenthusiastic specialization.

THE HEALTH TRAIN. — Up to the first of the year, the health exhibit train sent out by the Louisiana State Board of Health has visited twenty parishes and fifty-two towns, and it is estimated that 5,600 people have visited the car and that 1,500 have attended the meetings and lectures on hygiene and sanitation. The train is expected to tour Mississippi after the work in Louisiana is finished. — *Jour. Am. Med. Asso.*

Branching calculi in left kidney.

Calculus in right ureter.