

DISEASES OF THE NOSE AND PHARYNX

—AND—

THEIR TREATMENT

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It is to the more common forms of the diseases of the nose and pharynx requiring surgical interference, to which I wish to refer. For permanent relief to most of the more common forms of nasal catarrh, surgery is indicated.

Take, for instance, first, probably the most common of nasal troubles, the so-called *chronic nasal catarrh*. Let me cite a case, examples of which I see ten or a dozen daily. They come with this history: "Doctor, I catch cold easily; how, I do not know. My head stops up; I get my breath with difficulty; my head aches; my ears feel full or stopped up. Even between my colds, one or the other side of my nose is obstructed; which ever side I lie on closes." Some of the patients complain of loss of voice with each cold, which is the result of laryngitis, which can never be cured until the nasal affection is relieved. Some of them have to use their handkerchiefs a great deal. Many of them com-



plain of the mucus dropping back in their throats. This must be a familiar picture to most practitioners.

Now as to the pathology of this condition. The sub-mucous tissue of the nose is made up of a mass of blood vessels, the walls of which either by some dyscrasia or by frequently-recurring colds, become very much relaxed. These vessels are said to empty and fill as those of the penis. Some have said that excessive venery will produce this form of catarrh. On the least exposure to draughts of air, the blood is driven to the internal organs; the vessels of the nasal sub-mucous tissue fill; the nose, as a consequence, is obstructed. Of course the condition of the skin, and of the general health, have much to do with this, but this is not surgery; so I merely mention it. Again, when the patient is lying on one side or the other, gravity fills the vessels of the lower side.

Seeing this in the acute stage, local applications, in the form of sprays, etc., we can well understand, with general treatment, will be of much service; but it is usually many months before the patient realizes there is local trouble, and many, many more before he will acknowledge to his doctor that he has nasal catarrh; and many, many more before the rhinologists have an opportunity of seeing him. So it will be observed that the chances of seeing the patient in his first attacks are but few.

Admitting what has been said as true, what effect can astringents, stimulants, or in fact any local medications, have? The true cause is deep-seated in the sub-mucous tissue, and the disease is what I call *nasal engorgement*, or engorgement of the nasal sub-mucous tissue, to distinguish it from true nasal-tissue hypertrophy.

With a weak solution of muriate of cocaine, the two affections can be differentiated. Cocaine will shrink the engorged tissue, but will not affect the hypertrophied. In the management of this engorged tissue I use to depend upon, and extol highly chromic acid, or some of the combinations of acetic acid. To get any service from either, a large slough must result, which leaves a correspondingly large cicatrix, on which the secretions will collect, dry and decompose, for-

ever afterwards causing much discomfort. Chromic acid has the effect of shrinking the blood vessels, but it is not permanent. We must tie them down or destroy some of them; and the indication is to do so with as little superficial cicatricial tissue as possible. It can be done by electrolysis. This is difficult, though, because it is very painful. You may ask, why not prevent the pain by cocaine? Because cocaine shrinks the tissue so as to render it very difficult to get the needle under it. I have tried the electrolysis, but had to give it up. A small electro-cautery has the same objection. I had made, as I show you here, a long slender knife for the thermo-cautery. This is very painful, the reaction following very great, the cicatrix large, and it has to be introduced heated. This heat cannot be confined, either; all the metal is heated, and the radiated heat does much harm. It ties down the vessels, but does more damage than necessary.

The galvano-cautery, which I shall consider now, is, I believe, taking everything into consideration, the best. I had so much trouble with chemical galvano-cauterics that I had to give them up long ago. I have invested hundreds of dollars in them, and just when I wanted them for use was when they were not in order. After some years of discouragement, I believe we have at last, in the incandescent current, found something that will do the work. I have had led from the "Louisville Electric Light Co.," a wire giving me such a current. By this rheostat made by the "Gaynor Electric Supply Company," of this city, I have complete control of the current. You will observe that I can bring this platinum knife to any degree of heat I may wish. This can be introduced in the nose cold, heated then as wished, the application made (by cocainizing the tissue), without pain, and the knife withdrawn nearly cold.

Take a case of engorgement of the tissue covering the inferior turbinated bone; it is this bone that is most frequently involved. I spray the nose with an eight per cent. solution of cocaine, and in a few moments insert a piece of cotton, saturated with the same solution, which will reach the full length of the bone, leaving it in ten or fifteen minutes. I

then insert my cautery-knife back to the posterior end of the bone, turn on my current slowly, press firmly on the knife, and, bringing it slowly forward, make a deep horizontal incision the full length of the bone. If the tissue is very much engorged, I may make two parallel incisions, then insert the same cotton with the cocaine on it, and leave it in several hours. No pain results, and but little reaction follows. There is usually no hemorrhage. I get as a result one or two deep linear cicatrices, which tie the relaxed vessels down, and as a result no more nasal stenosis, no more dropping of mucus into the throat, free respiration, recovery of hearing, no more laryngeal catarrh; or if these little symptoms do not disappear, a short treatment directed especially to them, relieve them, with but few chances of a relapse if the skin and general condition be properly attended to.

Hypertrophies of the nasal mucous membrane and nasal polyp can be relieved by electrolysis, or the galvano-cautery; but I think the best method is the cold wire snare, of which there are numbers. I have tried the Jarvis, the Douglas, the Sajous, and almost all that are in use, but I prefer Mackenzie's, with a slight modification I have made. Tafel Brothers, of this city, made them. I hope soon to make a further modification which will still increase its utility. The main beauty of this snare is that it can be manipulated with one hand. I have yet to see a polyp, or a hypertrophy of the mucous membrane of the nose, or of the turbinated bones themselves, that I could not remove with this snare. Only a few days ago, I removed quite a large hypertrophy from the anterior end of the middle turbinated bone.

For the removal of bony ridges springing from the septum, when I think it is necessary to remove them, (I modify it in this manner, as I believe they are often removed when it is not necessary), we have chisels, gouges, plows, etc. I have a dental engine, with burrs made with extra long shanks, with which I propose to tunnel these ridges and crush them in, thus again getting a great desideratum, a small cicatrix.

Deviated septa are, I think, frequently given the credit of causing much trouble, without facts to support such. There are but few people in the world who have straight

nasal septa—some the result of trauma, but many the result of nasal engorgement, polyp and hypertrophies. Remove the cause, and many of them will straighten without other treatment. Of course some of such cases, (one of which I had some months ago, in which I fractured the septum, and splinted by plugs, getting an excellent result), I say, some few of them need surgical measures to correct them. In the case of the septum that I fractured, I also took from one side quite a large slice of cartilage.

As a cause in some cases, and in some as a result of nasal engorgement, we have hypertrophy of the pharyngeal tonsil, or the vault of the pharynx filled with adenoid tissue.

According to Lacauchie, as confirmed by Kölliker and Luschka, the adenoid tissue at the vault of the pharynx is a conglobate glandular mass, having the same structure as the tonsils; and hence it has been termed the pharyngeal tonsil. It is soft and spongy, and so closely incorporated with the cartilaginous tissue uniting the pharynx to the base of the cranium that it is exceedingly difficult to separate them. The follicles are identical with the solitary follicles of the intestine, and when in great numbers give a glandular aspect to the vault of the pharynx.

Hypertrophy of this gland is more common in childhood than in adult life, and is probably oftener present in males than in females. Cases I have seen this summer were in persons under twenty years of age, the majority being under ten years; the youngest is four years old. The symptoms are those of a severe cold in the head, with very much less secretion from the nose than commonly marks a simple cold. The secretion drops down from behind the soft palate, is sometimes very excessive, occasionally very tough and difficult to remove, and sometimes the efforts to get rid of it produce nausea and vomiting. As stated before, one or the other or both nostrils are closed posteriorly, so the breathing, especially during sleep, is distressing. The child usually sleeps with the head thrown back, lying flat on the back, and often with the arms over the head. The mouth is wide open; the tongue, becoming very dry, drops back into the throat, producing a distressing strangulation; whereupon

the child cries out and jumps up badly frightened. A short period of rest ensues, to be followed by another paroxysm. In this way the little one passes the night, and on waking in the morning is as tired as when it went to bed. As a consequence, such children are usually anæmic, have little appetite, are stunted in growth, have narrow-pointed chests, and often the arch to the hard palate is much narrowed. The child coughs, catches cold easily, is deaf, and shows a deficiency in the articulation of such nasal sounds as *m* and *n*, or has what Dr. Meyer, of Copenhagen, calls "dead pronunciation."

Such patients have no use of their noses; have never realized the importance of the organ; can neither breathe through them, nor blow them. They never have a good night's rest.

The diagnosis is usually easy. With the rhinoscope no mistake can be made; or in small children the finger can be used. If the vault is filled with a number of enlarged glands it presents to the finger, as Cohen says, the sensation of a bunch of earthworms. If seen, it looks much like a bunch of cauliflower. Again, it will look as in the patient whose history I reported some time ago.

A young man, aged nineteen years, told me he had never known any use for his nose. He had never been able to breathe through it, nor blow it. He had Meyer's "dead pronunciation" to perfection. He said he had never had a good night's rest; was just as tired on getting up in the morning as when he retired at night. He slept with his mouth wide open, and breathed through it both night and day—had horrible dreams and nightmares. His mother said that at night his breathing could be heard in every part of the house, and sometimes, after a severe paroxysm or an extra effort to get more air, he stopped breathing so long that she had frequently hurried to his bed, fearing that he was dead.

I found his nose quite free, but posteriorly the nasopharynx was filled with a red, glistening mass, convex forward, and perforated with many openings like the faucial tonsils. There was absolutely no space on either side or in

front; it was adherent to the pharyngeal wall. I endeavored to snare it, or get hold of it with Mackenzie's laryngeal forceps, but failed. I introduced my finger behind the soft palate, hugging the wall of the pharynx closely, and found that I could tear it loose from the pharynx easily; it yielding like liver tissue. After getting my finger well up in the vault of the pharynx I discovered two horns extending into either post-nasal space. These I also tore out with my finger. Relief was almost instantaneous. He was now able to blow his nose and breathe through it, which to him seemed very strange. A weak carbohc wash was given. Some slight reaction followed, and for a few days some small pieces of tissue were discharged. Several days later he returned home, having been entirely relieved. Several months have now passed since the operation and there is no return of disagreeable symptoms.

It is indeed a triumph for rhinology when a disease that had caused nineteen years of distress should be relieved in a few minutes by an operation so simple. Of course in younger patients relief is not so prompt or easy, many days of patient treatment being often required. Children do not bear cocaine well, and because of hæmorrhage, which always attends the operation, general anæsthesia can not be resorted to. All we can do in these cases is to remove the tissue by piecemeal by an operation once every two or three days. I sometimes scrape the pieces out with my finger, or the curette, or pull them away with the forceps. In some cases I use chromic acid. I have seen no benefit from washes or powders. Not infrequently this trouble exists with engorgement of nasal tissue, and sometimes with true hypertrophy. Some physicians claim that by removal of the hypertrophied and engorged nasal tissue the adenoma in the vault of the pharynx will disappear. This has not been my experience. If the physician will but note the number of children presenting the symptoms described at the beginning of this year, he will be convinced that the affection is by no means uncommon; if he could see these children after they have been put to bed, and witness the distress occasioned by this form of nasal obstruction, he

would wonder that it should have received so little attention at the hands of medical writers. Since the affection is quite common in children (few of whom receive treatment), and not common in adult life, it is clear that many of the cases are cured by puberty. Great and irreparable damage, however, may and often does result before puberty is reached, and in view of this fact the importance of early and efficient treatment is manifest.