

MUST IT ALWAYS BE A TONSILLECTOMY?*

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In every community there is a large number of persons who stand in need of something done to their tonsils. In these days a conscientious operator, stressed a bit, perhaps by popular opinion, lay- and professional, feels that he is negligent in his duty to his patients and colleagues if he does not always do a tonsillectomy when the tonsils are the objects of suspicion. If he is in "the swim," so much work in that line stares him in the face that he feels that he must

"Count that day lost
Whose low descending sun
Views from his hand
No tonsillectomy done."

If he is obsessed with the idea that there is no other way to meet the requirement of an honest opinion of "the tonsil menace" except to enucleate, then the above couplet is not merely slightly satirical, but really a confession of faith, his form of fanaticism.

Every once in a while one nowadays hears an echo of remonstrance, gradually swelling into a real murmur of protest, as was recently expressed to me by a wealthy lady, whose erudite medical consultant wished to give her the benefit of every doubt, and so four years ago they started to put her through a variety of "stunts" to find out the cause of her rapid heart action. The empirical surgery of the day was called into requisition—rank empiricism, she chose to term it—a perfectly just criticism of the spirit of the times. If somebody gets relief from having his tonsils out, then why not try it on everybody who has the same symptoms?

If an appendix made one person have certain troubles, why may it not do so to the next? Teeth, appendix and tonsils can

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and do make a lot of trouble. Let's eliminate them, and so we often do without much evidence of a positive nature. This removal of "organa non grata" occurs so frequently and safely in these days, thanks to the skill and wonderful technic of the surgeon and operating room personnel, that we become a bit callous and forget some sad facts. For instance, in one year of my own small sphere of activity, I know of several cases of lung abscess and all that they sometimes mean, and one death, just to settle the question of a possible connection of the tonsils with focal disease. And one in which an innocent and valued life was shortened when he consulted a stomach specialist, who advised that the teeth be removed. The dentist did some, the undertaker the rest. And this happens now and then everywhere. Is it right?

But to return to the lady. First she had her teeth out, because so many seemed to possibly be the source of trouble. Failing here, they eliminated her tonsils, a most uncomfortable, distressing and weakening experience for a woman of sixty years plus. As she somewhat naively put it, "and I am now consulting you for the sore throats which were surely to be relieved by this mild (?) procedure."

Failing again, they attacked a rectal condition as surely the cause of the trouble. Incidentally they did some local good there, although the heart still went on its merry, rapid, tantalizing way. Then they did something else—I seem to have forgotten that; failing there, she went to Johns Hopkins, where elaborate X-ray, laboratory tests and other things were done to her. She was threatened with another flight of surgery, but went home to consult her family. While seated in the train she fell into conversation with a very well known medical man, who himself had been the victim of much empiricism, and who was advised—equally empirically—to see if milk and milk products were not the cause of his trouble. They were, and he advised her to try it, and in her case they also were. If she avoids milk and milk products, except a sparing amount of well made butter, she has no trouble, and this was three years ago. Previously she had been for a long time on a purin free diet. When she contemplates, with a degree of charity which is as rare as it is exalted, what a well meaning surgery has done to and for her, she sighs, and merely says she wishes

she had her teeth back. I was only with the greatest struggle prevented from reciting to her what a wag friend of mine delights in flaunting before me from time to time,

"The lives of rich men oft remind us
Of the operations that are done
Not always because sore needed,
But because they have got the 'mon.' "

In what precedes in the history of the lady in question we see what always arouses the most violent protest in my soul—a lot of guesswork, with surgery as the potent factor. In her case, she still lives, but ought we not to labor without ceasing to arrive at more exact methods?

Are we forever to go on trying with knife and guillotine to undo the mischief done instead of ever pausing to consider the mischiefmaker? Shall we never have time when trying to put out the fire to consider ways and means to prevent its origin and spread? How much time do we, who are thus assembled to listen to discursive remarks like these, ever give to the question whence came these germs whose unwilling hosts we are? Do we sufficiently encourage by even the briefest review the patient work of the laboratory man who, if we would listen to him, could tell us much about the life history of many a germ? And might he not do more if we all went to him and helped him in his studies by giving them the human touch, so to speak? He knows now that you can take the most virulent germ and by passing it through certain cultures entirely change its characteristics. Acid-fast may become non-acid-fast and vice versa, pathogenic may become non-pathogenic and vice versa. Properly encouraged and stimulated by your broad minded personal interest, might we not learn the earlier sources of these germs and prevent them from becoming pathogenic? And would not that be the greater miracle? However, we must so far, as the result of our mental habits, ever devote our earnest endeavor to put out the fires already started, but in doing so should we not when the question, for instance, of focal disease in an adult is concerned, ask ourselves, Is there not some other way, sane and sure, to prove the tonsil either as guilty or of making it guiltless, or both, without putting all patients always through an ordeal of tonsillectomy?

For years in cases not seeming to require very radical measures I have been working with a method which has turned out to do exactly what is suggested in the last sentence. While debating whether my conclusions were worth chronicling before this distinguished body, I have learned that others, by other processes, have accomplished very brilliant results and proved to be true the very conclusions which I have drawn. The three methods which give class and distinction to this work are, first, that of Irvin Moore, in the use of caustic paste in the shrinking and actual removal of undesired and undesirable tonsil tissue, and very lately the splendid idea of using the potent X-ray, as has been done now by numerous operators, but which was first called to my attention by the articles of Wetherby, and by Murphy and his collaborators, who are working at the Rockefeller Institute in New York. And lastly, and by no means least, we are to hear from our beloved and distinguished fellow member, Dr. Delavan, of the use of radium for this same purpose. The action of the two last is similar, but in the case of the latter so simple in its application, as is evidenced by F. H. Williams,* when compared to the extensive apparatus necessary for properly controlled dosage by X-ray.

The object of all is to eliminate the tonsil as the trouble-maker, and at this point might it not be profitable to consider the question, If a faucial tonsil is projecting more morbid matter into the system than any other part of the ring of Waldeyer, what part of the tonsil does it? What constitutes the difference between the tonsil which does and the one which does not? If any one not accustomed to giving the subject much consideration will take the pains to pass a probe with a right right angled curve into any of the usual crypts of the tonsils he will be wonderfully surprised at the ease and frequency with which the probe can be made to slip under and come out through another cryptal opening. This tract leading from one to the others is usually at the bottom of the crypt, often right up against the capsule, and communicates with the bottom of another crypt or crypts.

*Treatment of Hypertrophied Tonsils and Adenoids by Radium. A Preliminary Statement. Boston Medical and Surgical Journal, March 10, 1921.

Such fistulous tracts probably come because the deepest parts of such crypts have been dilated when evacuation was interfered with by the swelling at the outlet, and the simple pressure on the intervening walls caused absorption, or when particularly virulent matter may have caused active erosion to penetrate the wall and thus make a single cavity in the depth with two or more outlets. These caves or cisterns are full of fluid matter at all times and never sterile.

It is the crypts with recesses and tunnels beneath the surface which cannot cleanse or evacuate themselves which usually constitute the threat or menace of an evil tonsil, suspected of causing focal disease. At times the more fluid parts run out, leaving the cell detritus behind, and we have a cheesy substance which, when large enough, comes out as a separate mass, quite odorous and often complained of by the patient. These masses, to my mind, are never as momentous as is the menace of the fluid stuff which preceded them. Unless actually diseased, as in tuberculosis, syphilis, cancer, which are not being considered at this point, the usual tissue intervening between the crypts of the tonsils, absorbs perhaps, but practically never in itself constitutes any threat. If it does, then every tonsil does, and there are many square inches of such threatening tissue all over the base of the tongue, tonsillar lingual folds (French), lateral columns, and posterior walls of the pharynx, and, worst of all, in the region of the vault of the pharynx, where the pharynx, tonsil, adenoid is or was. So I think it logical to say that the lymphoid tissue in itself, even when thickened and hypertrophied, constitutes no actual menace. It is only when it harbors exudate in pockets which cannot be easily cleansed and flushed out by overflowing secretions of the racemose glands, which always empty numerously and copiously, into the apex of the crypts, that it will make trouble.

Said retention areas unquestionably exist wherever the crypts or pockets communicate under the surface. Speaking as we are of faucial tonsils, we should bear in mind that they are completely delimited by a definite, firm capsule, which a wise and beneficent Providence created so that those of us who almost always operate with a snare tonsillectome, can do a neat, clean job and remove the mass in toto. This limiting

membrane is so constituted as not of itself to absorb, and during operations is penetrated, when not too much traumatized, only by the lymphatics and blood vessels.

When these pockets constitute real abscess cavities, as they appear sometimes to do, then this very squeezing to which we subject them when the tonsil is removed entirely and solely by the cold snare, must force the fluids of these submerged pockets into the lymphatics and general circulation, and once in a while it produces a severe constitutional reaction immediately following the operation. Otherwise we see this matter ooze onto the surface of every tonsil as the snare cleaves it from its bed.

This very foul secretion gets down into the blood and secretions in the throat at the time of operating under general anesthetic, and so gets into the lungs, sometimes making the much dreaded lung abscess. This possibility of forcing poisonous matter into the system constitutes my reason for invariably adhering to the plan, never, if possible to avoid it, to operate while acute inflammation renders the germ activity of all the fluids in the tonsillar crypts more potent for evil. That others have operated in the midst of a quinsy or other acute seizures with impunity by no means leads me to go against my reason, and some very unhappy results have occurred.

On account of the above mentioned facts, even when intending later to do a tonsillectomy, I like to proceed just the other way. I like to slit up all the pockets, to get rid of all known and accessible retention areas, subdue all active inflammation and then see what happens. If favorable results occur, all well and good. If not, then the tonsil is freed from any adhesion it may have with the pillars of the palate, or plica, no pockets of matter are ready to burst into the lymphatics, as well as towards the surface, and the whole tonsillectomy takes place with ease. Particularly does this line of treatment commend itself in tonsillectomy on the adult when one expects to do the operation under local anesthesia, or better still, nerve blocking.

Since I have worked in this way, a number of interesting things have come to light. First, one can frequently establish by the simple slitting beyond all peradventure, that certain focal symptoms are due to the tonsil. Secondly, one can

so successfully conduct the work as to free the tonsils of a definite menace, for example, the streptococcus viridans.

Three years ago I had a patient who for over a year had a bursitis in the shoulder, and later, after I saw her, a tender joint in the foot. She had been advised to have her tonsils removed, and the date was set. Her dentist steered her to me because she had definite pus pockets in the gums around two teeth. This pus and the crypts of her tonsils contained streptococcus viridans. She being nothing loth, even if the dentist was a bit doubtful, we went to work, he to cure the Rigg's disease, and I to eliminate the retention pockets in the tonsils. The gums and tonsils ultimately became free from streptococcus, the shoulder and the foot well, and the patient has remained well ever since. A vaccine was also used to eliminate all question.

The first treatment of the right tonsil gave immediate relief to her shoulder, and as that was before anything else was done and was greater than anything else that had previously been accomplished, there could be no question as to the relation of cause and effect. Also, vaccines alone have notoriously failed to cure these cases. I think here that the gums were first infected, and later the germs infected the whole mouth and tonsils. While I agree with you that "It takes more than one swallow to make a summer," a swallow is a swallow, "for a' that." And were this the only instance, it would be worth the chronicling, but I have observed this almost magical relief from thus simply cleaning up the crypts too many times to have any doubt in the matter, any more than when it has occurred after that exceedingly impressive and spectacular encounter known as tonsillectomy. That is—please observe—we have both established the connection between the tonsil and the distant disease, and cured the patient at the same time.

The recent article already referred to in the Journal of the American Medical Association for January 22, 1921, by Murphy and others working in the Rockefeller Institute, demonstrates that not only can tonsils be shrunk in size by X-ray treatment but the crypts become free from streptococci while being thus treated. My own observations are thus corroborated. Their explanation is the same as mine. The shrinking in size lessens the retention in the crypts and the germs die.

They deny any special or specific action of the X-ray on the germs themselves.

This is, however, no more, you will remember, than Dr. French has told us he can do by curettement, or, on another occasion, we were told by Dr. Delavan that he accomplished when he positively demonstrated that he could eliminate carriers of disease by his complete disinfection of the nose and throat by his method of using dichloramin-T.

As these cases of my own have multiplied and have been observed, some for perhaps ten years, I felt so sure of the matter that I was almost ready to say that I could in the above way always determine when a tonsil is or is not a menace.

A young man, directly following a sore throat, had multiple joint symptoms and was permanently invalided. I was asked if I thought his tonsils caused the trouble. Matter could sometimes be squeezed out of them when adroitly and firmly compressed. I said I could not rule them out, but I would treat them so they would constitute no further menace. This I did, so thoroughly that I felt justified in saying that I thought I had them all right. Then he went away to a sanatorium noted the country over for its insistence that the tonsils be removed as a *sine qua non*.

They took cultures from the remnants of the tonsils, they introduced hyperdermic needles into the tissue of the tonsils and sucked the matter from the deepest accessible area, and in the end they told him "they guessed they would look elsewhere for the trouble." "Perhaps a gallstone operation or a diet would restore the youth," and they improved him by the latter.

Another instance where the tonsils must be removed. Nothing doing, unless patient complied. Slitting and clipping reduced the tonsils to a sterile mass, and the doctor was told that a complete removal had been accomplished. He was more than pleased with the "beautiful tonsillectomy," and then, at my request, as an obstinate iritis was now coming on, with further search a pus tube was diagnosed and removed. Patient is in blooming health. (I forgot to add that previous to my efforts she had many of her teeth out, and with no effect.)

Case after case seems to prove that if there is no glandular—lymph node—swelling in the neck, which always means un-

questionable absorption, and the crypts are cleansed and sterilized of any suspicious streptococci, one is justified in claiming such a tonsil is not producing evil of itself, the reason being that these treatments can be so thorough that nothing need be left which will harbor pathogenic germs.

Every once in a while one will score a failure, just as he often does when he does a major tonsillectomy, a very good argument, it seems to me, in favor of giving the weak and timid a chance to get by without the harder, dangerous work.

I have particularly in mind as I write these words, meeting on one occasion, socially, a very blooming specimen of comely womanhood. The young matron greeted me by name, and as I presume my face did not show the response she expected, she laughingly accused me of not recognizing her. Then suddenly I exclaimed, "Yes I do; but what has happened to you?" "Nothing but your own handiwork." She had some two years previously been compelled by family happenings to discontinue work which I had been doing on the tonsils, and I remember at the time that I regretted very much indeed not being able to finish up. She had been very strongly urged to have the tonsils out (as you will see, most excellent advice), but dreaded it because she was so weak and miserable. She had a lot of various things the matter with her, and there was enough glandular infiltration in the neck to make one suspicious of the connection with the tonsils. I proceeded as usual to slit up the crypts, and punch out all undermined areas, finding in one tonsil a real abscess. Although her course of treatment was only about half done, she was compelled to stop, but had already begun to improve. In spite of ceasing all treatment, she gained twenty pounds, lost her pallor, recovered her initiative, and was the transformed individual I discovered. Some weary wag will say, "Think what might have happened if the whole of her tonsils had been taken out?" That you will have to conjecture. I was perfectly satisfied with what my efforts had accomplished. Certainly no perfect tonsillectomy, by whomsoever performed, had ever done more. Some tonsil tissue remains, but the pockets are removed.

I can surely and safely affirm that this has happened so often that I know I am not taking too grave chances, that I

am never trifling with anybody's lease of life, or happiness, by suggesting it as an alternative to tonsillectomy. Please let me again state it is only an alternative, a substitute for tonsillectomy, when from choice or necessity you cannot do the more radical procedure.

The question of daring to do surely enters into a situation such as the one which follows. A lady of some forty-six summers had a most uncomfortable joint affection flitting around from one to the other, and apparently finally settled in the hands and feet, she being some of the time unable to use either, a predicament hard to beat. In addition the heart action was irregular. She lived out of town, and was brought to me a number of times to see if the simple slitting would settle the question whether the tonsils were the cause of the trouble. She was certainly the kind of a case where if one could avoid a serious operation it ought to be carefully shunned. The tonsils were small and yet what we would term suspicious, as indicated by French's transilluminator, a much too little used instrument. Nothing very serious in the way of accumulation of matter in the tonsils was found, but with no other difference in the daily routine from that of the previous months, she began to improve, and no one could possibly convince either her or me that the tonsil work did not cure her. Certainly she went through the two hardest winters of her life, the first, while undergoing treatment, where, owing to the circumstance of her husband being in Washington and her help all taken away by war activities, she did her own work at home and no end of Red Cross work, thus as you perceive having the use of her hands, feet, head and heart; and the previous winter she had been waited on hand and foot. The relief began after four treatments.

I cannot think of anything I have overlooked in making up my mind that these treatments have been the cause of the improvement noted, but in several instances, when, as a tonsillectomy itself often does, it seemed not to have relieved successive attacks of sore throat, a little more thorough treatment applied in the same way to the tonsils themselves did the trick.

Often when the work done to the tonsils seems to have failed a bit of attention to the nose and the much neglected

nasopharynx will turn the tide from failure to success. Also we have been recently shown by Dr. French of Brooklyn that accessory tonsil tissue, with well developed, massive crypts, capsule—all the elements of a middle tonsil—often exists in the region between the faucial tonsil and the lingual tonsil. This tissue he was bold enough to attack with a Sluder tonsillectome, having by his transilluminator proved it guilty of criminal possibilities if not intent.

Such conspicuous masses have been removed, so well encapsulated, so cleanly and smoothly enucleated, that one could readily pass them off as enucleated tonsils. That these can make trouble by absorption and can be made innocuous by milder measures I have successfully demonstrated this last year, and am sure this explains why, when both faucial and lingual tonsils have had their fair meed of attention, I may have failed by having overlooked this region just mentioned. This region is often forgotten, when a real hard tonsillectomy has been done, and this brings us to a final suggestion before describing the simple methods I have used in the actual work.

It is not a terrible crime, in my judgment, to have omitted a bit of lymphoid tissue. I do not believe it can be helped. In any case, the best operators in the country (which means the world); do and always will occasionally leave tissue behind if for no other reason that it is too small to see, and it later grows to take the place of the removed tonsil. Small bits are, apparently, frequently overlooked, and especially when working with local anesthesia or nerve blocking, not merely because of the pain but because the gagging, bleeding, fainting or other bad actions on the patient's part make us desist from further trial to the patient. I repeat, I consider it no crime to have thus omitted some tissue. By simple slitting and punching out, and the galvanocautery shrinking, one can later care for this tissue with accuracy and safety, and thus oftentimes avoid an injury to the palate, base of the tongue and the deep tissues of the neck, which can all too easily ensue when rapidly, at the end of a bloody operation, attempting to gather into the snare whatever small fragments it will grasp. The clean cases which do not bleed are the very ones which seldom need any extra work.

Please understand that in most of what I have said in this paper I have in mind the adult who, having had symptoms of focal disease, is having the tonsils eliminated, but it may be adapted to tonsils of any age. To young children, and the young timorous adult the best work to my mind is always done under a general anesthetic, and naturally when one operates radically he always removes all adenoids from the nasopharynx.

And now a few words as to the method. After a thorough cocainization of the crypts, inside and out, with a finder one discovers all adhesions with the plica and pillars of the palate and the intercommunicating crypts of the tonsil, and generously and freely opens them up, the bulk of the work being done with Leland's or similarly constructed probe pointed knives. Then with simple punch forceps bite out or off any tissue which would seem to be liable to grow together again, which will often occur when left to drop together with nothing more than a simple slitting. The tissue between the crypts often has to be snipped out so as to make the cavities cup shaped or grooved, in which condition when healed over they offer no place for retention of matter deleterious to the system. The rule of the work is to do what is convenient and easy of accomplishment on one side and a week later the other, alternating back and forth until all pockets are abolished. If the tonsil is large and the crypts and the pockets deep, one has the choice of snipping and removing the superfluous hypertrophied tissue, or one can use the electric cautery or both. In my own case both are very frequently used. When the tonsils have been thus handled they are not very sore following the treatments, and one can accomplish just as much in the way of shrinking as he chooses, so much so that one can be greeted, as I stated in one of my cases, with the remark, "What a beautiful tonsillectomy." And it was; at least there was less tonsil visible than after many a so-called tonsillectomy. Furthermore, one rarely gets serious bleeding, accomplishes his purpose without upsetting the even tenor of a patient's life, even by a hair, does not distort or amputate any portion of the palate, and if his work—as we all so carefully do nowadays—is done cleanly, almost no infection can take place. One has rarely to work more than three times on the same

tonsil—five weeks of little or no discomfort at all, as contrasted to a patient I have recently seen for the second time, who was two months getting over the effects of his tonsillectomy, forever has a distorted palate and troublesome adhesions at the base of the tongue, nearly died from hemorrhage, having to be transfused, all to prove that the tonsil did not cause his sore throats and colds. I have treated him several times since the operation, which I distinctly advised against as probably unnecessary. I say when one contrasts and, as I sincerely believe, can by the former way rule out the tonsil absolutely as the cause of the trouble, why not do it in that way, where appropriate occasion presents itself, especially when if, as before stated, the tonsil should continue to rebel, a later tonsillectomy has usually only been facilitated.

The genesis of an idea or plan of procedure sometimes is interesting, often revealing. Years ago when removing adenoids my custom was not always to rip out the tonsils, as is now done as the invariable routine. Then we did it only when the tonsils were large. When I did not remove the tonsils I formed the habit of always, with finger or instrument, liberating the tonsils from the plica and perhaps anterior pillar of the palate, and was much impressed at the shrinking in size which this produced. Later I started to do this to the tonsils in cases where I was about to shrink them by ignipuncture.

Probably I have shrunk more tonsils in this way (ignipuncture) than almost any other extant operator. Naturally, some of my cases have since been tonsillectomized, and heads wagged at the failure of the method, but no oftener than enucleation itself has failed. Since I have done the preliminary slitting, fewer cases have relapsed, and by my present method I can more often completely get rid of all bad tissue than by any but the slickest kind of tonsillectomy. I have done all of this for so many years, with careful checking up, that I am venturing to offer this as a substitute in suitable cases for the much more serious, and in adults, painful enucleation. In presenting these thoughts for your attention there is nothing new or startling in them. It is only that they represent something definite and positive, and, after all, I beg of you, do not

for one moment think that I do not deem it wise to tonsillectomize my own clientele, nor do I desire to cast any slightest reflection on the splendid work of my fellow conspirators. Quite on the contrary. I merely reaffirm that if one does not care to do a tonsillectomy for any reason, I have in this manner accomplished just as spectacular, just as wonderful, just as enduring results as I or any one else has by the major operation, and all that I have said is really in the way of emphasizing, not minimizing, the importance of tonsil work.

May I not, in closing, quote from the eminent English observer, Dr. Irvin Moore, who, as before mentioned, in the *British Journal of Laryngology*, October, 1919, writes along similar lines and suggests when, for any reason, it is deemed unwise or contraindicated to perform tonsillectomy, the application of caustic paste to the tonsils? He shows some very ingenious cup to hold the paste against the tonsil. The paste is composed of equal parts of caustic soda and hydrated lime mixed with a little alcohol. "This escharotic not only destroys in successive layers a portion of the tissue by a process of disintegration, but also devitalizes a subjacent layer, causing it to become soft and friable. During the devitalizing process the tonsil undergoes general shrinkage. The largest tonsils have been reduced to normal size, whilst in the case of diseased tonsils there has been no blocking up or sealing up of septic crypts as may occur with the galvanocautery.

Though this treatment by this escharotic paste can never be expected to take the place in suitable cases of complete removal of the tonsils by operative methods, yet experience has undoubtedly shown that it is a highly effective and valuable alternative in cases so frequently met where risks of excision have to be seriously considered or where the radical operation is refused."

Now that it has been so definitely proven what can be accomplished by these various methods, and especially by the X-ray and radium, the pendulum may be expected to swing well over to the other side of the arc, but for myself, when advising patients I shall continue to do as I have already done in numerous instances. First get rid of the main pockets and adhesions as outlined here. Then have them have their X-ray or radium treatment. This should prove to be adequate to

produce all needed elimination when it is elected as the method of choice—but, as suggested by Stewart, *New York Medical Journal*, January 4, 1919—it can never be expected to exceed in efficiency a clean, perfect tonsillectomy, except as the effect of the rays shrinks other parts of the Waldeyer's ring of lymphoid tissue, as well as faucial tonsils. Also it will be reasonable to expect that certain shriveled up, sclerosed and atrophied tonsils, even when presenting some considerable mass, will not shrink or be altered by the radiant activity, by whatever means administered, as will others even smaller when composed of the usual type of tonsil tissue.

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