

SOME UNUSUAL DISEASE CONDITIONS APPARENTLY CURED BY TONSILLECTOMY; REMARKS ON POST- OPERATIVE TREATMENT: PRELIMINARY REPORT.

DR. VIRGINIUS DABNEY, Washington, D. C.

That the faucial tonsils are frequently the source of serious systemic infection and may be the very fountain head of metastases is now so well known that I shall proceed on the assumption that this is a conceded fact. Yet, in many of my cases, so innocent was the appearance of the tonsils, and so few were the subjective symptoms elicited, that I would have declined to remove them had not a competent internist already eliminated all other likely sources of infection. It is most important that this step should be first taken in all obscure cases of arthritis, Bright's disease, retinitis and other states where a distant focus might be supplying the toxin causative of the disorder under investigation. There are, of course, perfectly frank cases, where the tonsils are obviously of the toxic type and need no confirmation of their guilt in causing the disease. A laryngologist may feel confident that a given appearance in a tonsil indicates its *possible* responsibility for a disease condition, but unless an internist of experience and judgment has first eliminated other possible causes, he would be showing poor judgment, if not actual reprehensible carelessness, in removing the tonsils. Shambaugh, whose wide experience and ripe judgment commend his opinion to our ready acceptance, says that "the throat specialist ought not to assume the responsibility of passing on these questions. They are problems that fall more properly in the work of the internist and often constitute one of the most difficult problems for him to solve."

Apical tooth abscesses have been shown capable of causing all the metastatic affections formerly attributed to diseased tonsils, and frequently both conditions are found in the same case. Where this coincidence of toxicity occurs, it is my belief that a careful history will reveal the fact in most instances that the teeth were the original source of infection, and, in fact, caused the tonsillar degeneration.

In view of the great sorrow to the patient, and the enormous economic loss to society of blindness, or even marked loss of vision, perhaps the most brilliant result of tonsil removal is that secured in clearing up the effusion in choroiditis and chorioretinitis of infectious origin. These cases so often proceed to blindness or serious

loss of vision, and with such rapidity, that any treatment which arrests the process, and even clears it up, cannot be overestimated. Thus, in some forty-odd cases which were referred to Drs. A. Y. P. Garnett and W. C. Moore for physical examination by various ophthalmologists, the tonsils were found responsible in 35 per cent (teeth 60 per cent, sinuses 5 per cent). It is well to invite attention to the fact that these cases were first seen by the oculist, then the internist and finally the dentist and laryngologist. Treatment was given as indicated by the findings of this group of examiners, with the eye specialist in control. So slight was the manifestation of tonsillar disease in many of these cases that I was reluctant to operate till I had had a consultation with the internist; yet every case showed definite disease areas beneath the plica, after dissection.

Chorioretinitis. The following three cases illustrate three different ways in which a diseased tonsil may create an inflammatory effusion in the eye:

Case 1. S. T. R., male, 24 years old, good general health. Dr. R. S. Lamb reported a mild but definite chorioretinitis with exudate, and suggested an examination of the tonsils and teeth. Teeth negative. Tonsils were removed in part five years before under local anesthesia, but I found a large piece in one fossa, and a small segment completely invested in the plica on the other side. Under ether both remnants were removed with much difficulty, and some pus and caseous material found beneath both capsules. Absorption of the toxin had been inevitable, as the tonsil tissue was absolutely hidden by the scar and mucous surfaces. Cure was complete in six weeks. This case illustrates the futility and even harm of an incomplete operation, aside from any ethical considerations.

Case 2. H. L. W., female, 27 years old, good general health, rather nervous. Eye report by Dr. J. W. Burke: Seven years before had disseminated chorioretinitis in the right eye, but no trouble ever found in the left, though she had had "a black spot before left eye;" exudative chorioretinitis found with great deal of exudate; no syphilis (Wassermann two years before, and no history of it, as well). After thorough examination by internist, I found her tonsils very suspicious and removed them. The next day the exudate was enormously increased which was, of course, entirely confirmatory of the part the tonsils had been playing. In a month the eye was normal. This patient had been examined by a man of international reputation, who handed her over to a rhinologist, who also did eye work; hence it is all the more astonishing that this specialist did not see the tonsillar disease (pus was secured by probing), but even did

a submucous resection on her septum. While the disease in the tonsil was not very obvious, yet the diagnosis by exclusion was so compelling (and a deviation of the septum never yet caused metastatic infection in the absence of sinus disease) that the tonsils should have been scrutinized with the greatest care. Had they been so examined their responsibility would have been manifest. This case illustrates the necessity for judgment and power of observation in an examination.

Case 3. G. D., female, 31 years old, general health good; nervous at times. Eye report by Dr. W. H. Wilmer: Headache for many years after reading, or exposure to glare, unable to read for more than 10 minutes without suffering afterwards well into the next day. At one time did no close eye work for a year. Central chorioretinitis. Physical examination negative; tonsils found diseased only on being drawn out of fossae and probed. Wassermann weakly positive. Removal of tonsils showed extensive follicular disease, and resulted in the eyes being restored to perfect functional health in three weeks. She had been refracted many times in efforts to relieve the pain and weakness of the eyes, but never had had her tonsils or teeth called into question. This case shows merely ignorance on the part of the original oculist. The eyes in all these cases received appropriate local treatment, such as dionin, pilocarpin, iodid of potash, etc., which assisted in hastening absorption, but did not remove the cause of the effusion.

Chronic indicanturia. H. H. H., male, 37 years old, fair general health; more or less tonsil trouble since childhood, but nothing serious. Typhoid fever eight years before, serious case. Indicanturia for ten years without interval; constant efforts at eradication without success. For past year and half subnormal temperature, ranging from 95° F. morning, to 97° F. evening. During this period anemic, dispirited and listless. Diagnosis of adrenalin insufficiency made (and very likely true) by competent internist; pulse 60, systolic pressure 95. Consulted me for relief of fullness in ears and slight deafness, subsequently found to be due to congestion of the mouth of the Eustachian tube, an extension of chronic inflammation of the tonsils. These glands were seen to be buried, moderately enlarged and extending very high into the supratonsillar fossa. Catheterization always relieved all symptoms, but only for a few days at a time. Removal of the tonsils, a perfectly obvious necessity, revealed deep disease and considerable pus, and resulted in permanent relief of the symptoms for which the operation was done, as well as of all those previously thought due to the adrenalin

trouble. The chronic presence of indican was not known to me, but, on my remarking on the astounding change in his whole attitude to his work and the marked physical improvement, he mentioned that the test made that day (two weeks after operation) showed the absence of indican from his urine for the first time in ten years; and it has continued absent after some ten months. The urinalysis before operation showed it in great amount.

Multiple Arthritis and Bright's Disease (hyaline casts, albumin, high blood pressure and headache). *Case 1.* M. W. T., female, 43 years old, fair general health; practically all joints involved, pain intense and swelling great; albumin and hyaline casts for ten years; severe migraine for five years; during past two years rarely absent for more than three or four days at a time. Eyes showed chronic disseminated chorioretinitis. Typhoid fever twenty years ago. X-ray of teeth showed numerous suspicious teeth, which had been well taken care of. Tonsils deeply buried, but had never given any serious trouble. However, at operation they were found sufficiently toxic to account for many, if not all of her symptoms. The teeth were extracted but showed no apical abscesses, though much caries in the upper portion. However, all teeth had been regularly filled and treated for years by competent dentists, so I believe they exercised little if any effect on the general condition of the patient. For the first six months after operation the patient had not one of the objective or subjective symptoms, and has had none of them to return save a few headaches in the past two years.

Case 2. M. B. H., female, 45 years old, general health poor, very nervous. Recurrent attacks of mild sore throat and severe arthritis in all large and many small joints, with great swelling and temperature up to 101° F. Teeth defective but well cared for. Hyaline casts, albumin in urine for several years (present day of operation); deposits in retina from old disseminated chorioretinitis; headaches often. Tonsils flat, but showing numerous crypts and some pus on probing. At operation one tonsil showed much detritus, and sharp attack of arthritis was caused in 24 hours. Culture of tonsils gave pure streptococcus, from which a vaccine was made and given for some ten weeks. Convalescence slow and pain left very gradually, but all symptoms are still absent after year and a half. The casts and albumin disappeared in two days and have not returned. Headache is still very rare, though stiffness without swelling or pain in joints occasionally manifests itself.

Darier-Roussy Sarcoid. This term is the only one under which the following case can be classified, in which Dr. H. H. Hazen as-

sured me the lesions are absolutely identical. He referred the case after an examination of the patient from top to toe, including the tonsils, which he said offered the only possible clue to an etiology.

F. C., male, 28 years old, complained of painful nodules upon his arms and legs, situated near large vessels and adjacent to bone, varying in diameter from half to one inch, deeply situated in the corium. Sections showed a pan-phlebitis and pan-arteritis with a surrounding infiltrate of epitheloid tissue (report of Dr. Hazen). In the seven years of his trouble the patient had consulted the best internists and dermatologists in the country, but had never had any relief or any real diagnosis till Dr. Hazen took hold of his case. Repeated Wassermann tests were consistently negative, and I found his tonsils certainly toxic, though not enlarged. Neither Dr. Hazen nor I had any very roseate prognosis for the result of the tonsil removal, but as they were diseased and had given him some slight discomfort in the past, and as his suffering from the nodules was constant and severe, the operation was a conservative and wholly justifiable measure, and such it proved. As usual, the tonsils were found much more diseased than they outwardly suggested, having many minute pockets of pus throughout their substance. In two months all the nodules disappeared and did not return till eight months later, when a gingivitis and pyorrhea alveolaris caused a slight recurrence. This relapse is now under control, and but strengthens the theory of the tonsillar origin, one of the focal variety. The return is thus obviously due to the development of a new focus, and this too is being proved by the disappearance under treatment of the nodules, directed at the gum and alveolar process disease.

Since the almost universal adoption of total removal of the tonsils as the preferred tonsil operation, there has accumulated much evidence that the cosmetic and functional results have been often disappointing and even disastrous in their local effect. In a few cases this is unavoidable, but often the cause lies in failure to treat the operative wound persistently till healing has taken place. Where this neglect has occurred the fossae are invaded with quick growing granulations and their subsequent organization into hard, irritating masses causes discomfort and interference with the vocal function of the tonsillar pillars. The deforming contractures which are seen at times are due to a totally different cause: failure to conserve the pillars at operation, removing their inner surface. After experimenting somewhat I have adopted a definite routine of post-operative treatment of the tonsillar fossae which has given me encour-

agement despite the occasional faulty results. After leaving the hospital the patient reports daily at the office and there the fossae are first sprayed freely with peroxid, the froth is then sprayed away with any bland alkaline wash and, lastly, the now thoroughly cleansed cavities are swabbed with any form of iodine and glycerin one may prefer. For the first two applications a spray is to be preferred to a swab as it penetrates much better, removes the detritus more thoroughly and is much less, if at all, painful. The pain which is always present, and the edema which is nearly always present in some degree, can both be much relieved and at times abolished by hourly normal salt solution irrigation of the fauces at a temperature of about 110° F., beginning three hours after operation and kept up as long as the patient is in the hospital. This treatment possesses the further advantage of materially hastening the healing process and removing the thick tenacious mucus, whose forcible expulsion on the part of the patient is so painful, and whose retention in the mouth so provocative of gagging, itself distressing and apt to lead to hemorrhage. Nasal irrigation is likewise helpful, in that it removes the clots and re-establishes nasal respiration which relieves the discomfort of mouth breathing, one of the lesser causes of the patient's suffering. It is an emergency measure (not routine) and should not be done more than twice after operation, however. The application, while the patient is still in the hospital, of various iodine solutions does not appeal to me, as the fibrinous covering which nature at once throws over the denuded surfaces is distinctly protective and even germicidal, and for this reason should not be disturbed for two or three days, at the end of which time it will have lost these properties and become a slough. This, of course, is no longer protective but an obstruction to the escape of noxious material. My objections to the early application is not only theoretical, as set forth, but eminently practical, as I have tried it faithfully and found it in no wise superior to the technique I have devised myself, one doubtless many others follow without my knowledge. Moreover, the pain it causes is always intense, and sometimes excruciating, which condition causes the reflection that we pay too little attention to the patient's feelings in many of our manipulations. When a patient says a certain procedure hurts, the remark is often not heeded, unless we reply that it is unavoidable; whereas it is generally unnecessary. Grasping the tongue in laryngoscopy, separating the alae of the nose or even depressing the tongue, that simplest of procedures, are all painful or free of pain in proportion to the dexterity or consideration of the examiner. Rough-

ness of manipulation bears no relation to thoroughness, nor does gentleness prevent a searching inspection. Inasmuch as a patient will submit to a more thorough examination and treatment at the hands of an attendant who evinces some desire to avoid unnecessary pain, I submit that this consideration is not purely academic but eminently practical. All patients are not aware that the Stoics regarded pain as one of the lesser pleasures, and probably would not subscribe to the doctrine if they did.

In all cases reported here the frequency with which tonsils outwardly little diseased have been shown as harboring serious toxicity, the source of metastatic disease, is striking. However, I wish to state unequivocally that I am reporting seeming cures and not recommending tonsillectomy for the relief of any of the conditions discussed herein, not excepting arthritis, unless the patient has already been thoroughly examined by a competent internist who has excluded other sources of infection; even so, the tonsils must appear at least abnormal, if not actually toxic. The abuse of the tonsil operation has grown to such an alarming extent since the promulgation of the focal infection theory that I do not wish to appear to lend my support to any increase in the list of diseases which justify tonsil removal. It is my creed that no child's tonsils should be removed unless it is possible to demonstrate a definite connection between those tonsils and some pathologic condition in that child. On the other hand, given an adult suffering from a disorder commonly associated with tonsillar disease, it is justifiable to remove these tonsils if there is a reasonable suspicion attached to them. I have seen four patients die of endocarditis (of proved tonsillar origin) from neglect of this precaution, though none of them had anything more severe when I saw them than a history of repeated attacks of tonsillitis, associated with slight pains in the joints. The tonsils were plainly diseased, though not much enlarged, except in one case. The deaths occurred, one in four years after my advice, the other three within two years, and none of them had any heart lesion or functional irregularity when seen by me. The heart in each instance was examined by a diagnostician of unquestionable ability; so I know the lesions which resulted in death were not present when I suggested operation, and hence I feel sure that the deaths were avoidable. One of the cases was especially sad, in that she was quite willing to submit to operation, but her family physician dissuaded her. It is hardly to be questioned but that her death lies at his door.

1633 Connecticut Avenue.