A PLEA FOR A MORE RADICAL TREATMENT OF ENLARGED TONSILS, VIZ., FREE EXCISION, WITH RATIONAL AFTER TREATMENT.

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In the Corps Journal of February, 1905, Major R. F. Austin, R.A.M.C., dealt with a subject of the greatest importance to all medical officers, viz., the treatment of otorrhœa and middle ear disease in the Army. In this article he pleaded for a more systematic and radical line of treatment than is usually accorded to such cases, outlined his scheme of attendance and regular medical supervision, and showed that by the adoption of such, benefit would result to the patient, and valuable time of trained soldiers be saved to the State.

I am prompted by the above to bring forward some remarks on another somewhat kindred affection, which accounts annually for hundreds of days spent in our hospitals at home and abroad, viz., chronic hypertrophy of tonsils.

Let any of us stationed at depôts or serving with young line regiments look over the medical history sheets of 100 young soldiers, on completion of, let us say, eighteen months' service. He will find that from 10 to 15 per cent. have been treated at hospital for "sore throat" of some form, that five to fifteen days have been spent there, and that the sore throat in 95 per cent. of cases could be classed under one of the following heads: (*a*) lacunar tonsillitis (usually called follicular); (*b*) peri-tonsillitis; (*c*) interstitial tonsillitis (quinsy); (*d*) ulcerative tonsillitis (rarest kind).

I do not propose to take up space by discussing in detail the features, or treatment of, these varieties. These can be referred to, if necessary, in any good work on diseases of the throat. After some three to eight days' appropriate treatment, whatever variety of tonsillar affection has been present, the symptoms will almost certainly have subsided. It is as to the wisest procedure to be adopted at this stage that I wish to draw attention.

Two courses are open. The first is to keep the patient in hospital on generous diet and tonics, before sending him back to his duty; being fully aware that within a year at most, in a large class of cases (to which I shall presently allude), he will come again under treatment for a similar attack, or rather for what is more

probable, a more serious form of the affection. The reason for this is, that the tonsil after each attack becomes more fibrous, more enlarged, and less resistant to irritating and septic influences. And so the cycle goes on, winter after winter, cold, sore throat, tonsillitis with its pain and constitutional disturbances to the man, and the deprivation of ten to fifteen days' service to the State during his enforced stay in hospital.

The second course, and I feel sure the right one, is very simple: free excision of one or both tonsils. It is fairest, perhaps, to consider this from the point of view of those most concerned.

(1) For the patient, the operation will be of the greatest benefit: he will be done for ever with the painful tonsillar attacks, his respiration becomes easier, doubling, drills, gymnastics, before demanding considerable exertion, will be rendered less difficult, and his appetite, sleep, spirits, and general health will all greatly improve. (2) For the State the man will be a better bargain. Instead of some five to fifteen days in hospital, say every second year (a low estimate), he in all probability not only will not suffer with his throat, and be compelled to give up his work, but the relief and stimulus given to his whole system will render temporary breakdowns from other affections less likely. As a consequence, in his three to nine years service less of his time will be spent away from his legitimate duties.

Cases suitable for tonsillotomy: (*a*) Where the tonsils are much enlarged, projecting beyond the anterior pillars and perhaps (one or both) touching the uvula; (*b*) where the patient comes to hospital for a severe tonsillar attack, *e.g.*, quinsy, lacunar tonsillitis, and volunteers the fact that winter after winter he has so suffered, and where the condition under (*a*) co-exists; (*c*) where in addition to (*a*) there exists nasal voice, obvious nasal obstruction, and evidence of old or still existing post-nasal growths with their consequences—high arched palate, projecting upper teeth, pallid face, deafness, vacant appearance, and general look of ill-aerated blood; (*d*) when co-existent or not with condition (*a*), on stripping the patient, and studying the respiratory movements, signs of the evil consequences of the action of the extraordinary muscles of inspiration on immature structures are apparent—pigeon breast, tendency to hernia, &c.

Operation.—In a considerable number of cases recently treated by free excision of one or both tonsils, I have never thought it necessary to give an anæsthetic, local or general. I would not, however, be dogmatic on this point, and dealing with patients

of certain temperaments, some local application of menthol or cocaine, or even a general anæsthetic, might render the proceeding more practicable for the operator.

The chief points, perhaps, before tonsillotomy, are to be certain the tonsil and its surroundings are no longer tender, and that all constitutional disturbance has entirely subsided. The actual proceeding of removal of tonsils is very simple. The patient sits facing the light. I sit opposite him. Holding the guillotine in my left hand, I sink the first two fingers of my right hand under his left jaw, and press the tonsil inwards. Next, with a light shaking movement, I get the tonsil into the guillotine and remove it. I then change the instrument into the right hand, and placing my left hand under the right lower jaw, remove the other tonsil. All this should not take more than ten to fifteen seconds. The left tonsil is rather the harder of the two to remove neatly, and should be done first. As to the instruments, opinions vary greatly. I used to prefer guillotines with a fork; now I use Charles Heath's, in which the handle is set at right angles to the gliding blade. It is an excellent instrument, is made in three sizes, one handle fitting all the blades. Should the patient refuse the guillotine, the cautery or wire ecraseur may be used. If the tonsils are very large, but flat and non-bulging, treatment is equally imperative but rather more difficult. In such cases Tilley's tonsil punch gives the best results. Slow removal of the tonsillar substance by wires, ecraseurs and snares, is tedious and painful.

Two days before removal of tonsils, the patient should be placed on milk diet, and a course of instruction in breathing exercises commenced, with a view to teaching him to inspire through his nose, warm, filtered and moistened air, as Nature intended him to do, instead of cold, dust-laden, dry air straight into the lungs by way of the mouth, which, up to date, most probably has been his habit.

After the operation he is kept in bed for forty-eight hours in a ward at a temperature of 65° F. Cocoa, tea, milk, eggs, bread sop, whey and lemonade are allowed, all to be taken cold. A large pad of wool is placed under each lower jaw, and kept there by a flannel bandage passed over the head. This serves to keep the mouth closed, and induces him to nose-breathe. After forty-eight hours the cut surfaces are swabbed twice daily with glycerine and carbolic. Inhalations, tincture benz. co. or of creosote, are given for the first two nights. On the third day he is allowed up, given very generous diet, and further instructed in proper chest expansion and nose breathing. A course of tonics is prescribed, the elements of hygiene,

cleanliness and ventilation are instilled into him, and he goes back to his full duties seven days at the latest after the operation.

The only danger of tonsillotomy is that of hæmorrhage. The risk of this cannot be ignored. Dr. C. Jackson states he has had to ligature the carotid in six cases. Fatal cases have occurred in all countries. Gargling with very hot water, alternating with iced water, iced compresses under the jaws, free exposure of the mouth and throat at an open window, with frequent inspirations through the mouth, the lying down position: all are useful in arresting hæmorrhage if venous in origin. Excluding hæmophilic patients, venous hæmorrhage is most likely to be met with in patients over 25 years of age who have suffered from recurrent attacks of tonsillar inflammation, and in whom the adenoid structures have been largely replaced by fibrous connective tissue, which, containing but little elasticity, is powerless to contract the divided venous channels.

At Golden Square the staff are very chary of removing tonsils in patients over 25 years of age by the guillotine. As a rule in such cases they prefer the use of the cautery, or, if imperative, enucleation under a general anæsthetic.

If the hæmorrhage be arterial, matters are very different. One is recommended to grasp the bleeding point—excellent advice, but difficult of execution. The best plan is to at once apply firm pressure locally. I use large forceps (like a tongue forceps), the fenestrated blades of which have attached to them pads of plain gauze. One of these soaked in turpentine is pressed over the site of the hæmorrhage, while the other blade is fixed under the jaw outside, and the instrument clamped. Pressure can be left on by this means for a quarter of an hour at a time if necessary. I had one very bad case of hæmorrhage. In this I tried digital compression, but met with difficulty and poor result; luckily, however, the patient fainted, a process I invited by closing all the windows in a small room, and keeping him standing by a very hot fire: when the heart's action became feeble the bleeding stopped. The great difficulty in such cases is to retain the patient's fullest confidence. With his mouth full of blood not unnaturally he is frightened, and may not allow either finger or instrument into his mouth. Among cases where one might be on their guard for arterial hæmorrhage are those in patients over 28 years of age, whose tonsils are very large and projecting, and attached to their bases only by a thin pedicle, containing probably but one arterial branch.

In the series of cases under notice I have freely removed tonsils in men over 25 years of age, but always at their own request. I

hold the opinion, however, that if every precaution is taken, and appliances kept ready, no healthy man should be denied the certain benefit of operation by an undue fear of possible hæmorrhage.

Sequelæ.—These should be rare. In my cases I have met with the following :—

(1) *Acute Laryngitis.*—This occurred four days after the operation (in a case where the tonsils removed had been unusually large and both touched the uvula). I can only ascribe it to direct chill, the cold air striking his voice-producing apparatus in a great and unaccustomed volume. The well-warmed ward and confinement to bed for forty-eight hours with the jaws bandaged up undoubtedly prevents my having to record larger numbers of this affection.

(2) *Peri-tonsillitis.*—(*a*) *Simple.* This condition reflects somewhat on the operator, as it, as a rule, must follow cases where the palate, uvula, or faucial pillars have been bruised or roughly handled during the operation. With care and increased experience it should rarely be present in any appreciable degree. (*b*) *Suppurative.* This must occur where the operation has been performed on suppurative tonsils, and where septic cut surfaces remain behind, or where infection has been conveyed to the freshly cut tonsils by imperfectly sterilised instruments.

(3) *Supra-tonsillar Abscess.*—In one of my cases this followed a very free excision, and must have been due to septic infection from the tonsils travelling up into the supra-tonsillar fossa. This I should have guarded against, and now do, by thoroughly exploring the supra-tonsillar region, and assuring myself that all inflammation has quite subsided. Gentle use of a probe will elicit this information.

Conclusion.—I can most strongly recommend, in all cases coming under the headings mentioned, the practice of free removal of tonsils, and the great value of impressing at the same time on the patients, or parents (in the case of children), the importance of using the nose as the sole channel for the inspired air. Twenty long quiet inspirations through the nose early morning, after lunch, and at bedtime practised for a few days will tend to create the habit, the good results of which will soon be evident to the patient and those round him. The more the nose is used the better it will carry out its functions. If one doubts this, let him look at the nose of a confirmed mouth-breather, and see his nostrils, narrow, small, and sluggish to dilate, and the general drawn and stupid expression of his face. I have seen lately many of these cases where, by the employment of simple breathing exercises, snuffling,

nasal obstructive symptoms, hay fever troubles, dry mouths, snoring, &c., have been, even in a few weeks, considerably lessened or entirely got rid of.

Synopsis of Cases.—Dealing chiefly with healthy young adults, 17 to 25 years of age, there is naturally a great sameness in my cases. Seven were of men over 30 years of age, and all were greatly benefited by free removal. Six were of men (with huge hypertrophied tonsils almost touching the uvula) who had recently contracted syphilis; with the prospect of some two years' treatment before them for this disease, and after explaining that considerable benefit would be derived, I readily obtained their consent to operation, and in all excellent results followed. In this class of case I hope to pursue this treatment energetically. In four cases the patients were unusually plethoric, and breathless on exertion; after free removal, and a course of breathing exercises, their respirations averaged three to five a minute fewer, and there was much less breathlessness.

Should adenoids be associated with enlarged tonsils to a marked degree, these must be removed at the same time, a general anæsthetic being given.

TABLE OF CASES ARRANGED IN CLASSES AS DESCRIBED.

Class	Number of cases	Years				
		Under 14	14 to 17	18 to 21	22 to 30	30 upwards
Class A.	45	5	1	31	5	3
,, B.	50	1	6	28	10	5
,, C.	16	—	4	10	2	—
,, D.	7	2	3	2	—	—
Miscellaneous. Removal of tonsils, adenoids and polypi	7	2	2	2	—	1
	125	10	16	73	17	9

Physiology tells us our lungs are entitled to a supply of inspired air under very definite conditions, viz., duly warmed, moistened and filtered, and that these are necessary for the proper interchange of gases. Air to fulfil all these requirements can be supplied by one channel only—the nose. Our noses are equipped with air-warming, air-filtering, air-moistening apparatus. Do, then, our lungs always receive such air? No. In many cases from various causes, ignorance of simple hygienic principles, working in constrained posi-

tions, &c., incorrect respiratory movements are picked up. The nose is used less and less, and the habit of mouth breathing is acquired. Cold, dry, dust and germ-laden air now reaches our lungs. Is it any wonder, then, that our pharynx, tonsils and fauces, in endeavouring to imitate the functions performed with ease by our nose, suffer in the attempt? Granted, then, "mouth breathing" once established, dry mouth, catarrh, tonsillitis, irritable cough and bronchitis inevitably follow. Let us, then, as far as possible, minimise the likelihood of these affections arising both in our patients and our own persons by making it a rule to carry on inspiration—yes, and expiration also—through the nose alone. There is no great difficulty in so doing, and to anyone sceptical of the effects that will follow, I would only say "try it."