Thesis submitted for the degree of M.D.
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Subject: Adenoids.

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Adenoids.

I do not pretend in the following essay to treat the subject of adenoids with completeness, but merely to set down my own experience of the condition. They remarks represent impressions obtained from lectures, discussions and reading not undertaken with the view of determining the original describers of symptoms but simply in the course of acquiring a knowledge of the subject and from observations made in practice. I have been induced to attempt a thesis on this subject by the frequency with which the condition is presented in the course of the practice I have conducted for close on two years. Since early in the summer of 1895 I have been the resident medical officer of an institution in the north-west of London where patients are not only seen in the dispensary but are also visited at their own homes; and it is in the examination of patients on whose account a home visit was requested that the most interesting conditions associated with the presence of adenoid vegetations in the naso-pharynx are met with. Throughout that time, nothing has struck me so much as the extreme frequency with which an exuberance of the pharyngeal tonsil occurs in children belonging to this poor-class urban community. I ought to say that decidedly the greater proportion of my cases occur in two
districts which are somewhat notorious places; then, of course, exist all interacting physical and social conditions detrimental to the health of children in a greater degree than that of adults. Such an explanation as that just given is necessary for a comprehension of the stand-point from which I have viewed my subject; it explains a probable one-sidedness not as yet fully appreciated by myself, but which may be obvious to anyone who has had the additional advantage of experience amongst the more comfortably circumstanced classes of the people.

It is remarkable that these post-nasal growths were not described till the introduction of posterior rhinoscopy nearly 40 years ago. The earliest observations were made by Clark in this country, and abroad by Zernak and Tüdich who gave us our first ideas on the subject of this paper. It was not, however, until Heier of Copenhagen wrote his paper that we obtained an accurate knowledge of these growths; not much additional information has been gained since then till within the last two or three years. What I regard as strange about the point just referred to is that posterior rhinoscopy should be entailed to the distinction of leading to this discovery, for the condition is sufficiently obvious without the aid of the mirror, and I have never found it of much
service in diagnosis though its employment is
interesting in cases where it can be used, and the
patient is old enough to submit to the necessary
manipulation.

—General Appearance, Site and Structure.—
The throat of a sufferer from adenoids is often
so sensitive that gagging is produced whenever
examination is attempted, but when a view is
obtained the entire pharynx is generally found
congested—it may have quite a reddened appearance.
The tonsils are more or less hypertrophied in a
large proportion of cases; this enlargement may
be very marked, the two fleshy masses meeting
in the middle line: their surface is generally
smooth but may be rather lobulated or mullbery
in appearance; the latter term is specially
applicable in the case of infants in whom the
small follicles are remarkably prominent.
The existence of hypertrophied tonsils in children
ought always to make one examine further for
adenoids. Another condition at times present is
granules of adenomatous-looking on the posterior
pharyngeal wall; these in children, are
absolutely indicative of adenoids, in fact there
are adenoid growths of wider distribution than
the repreihenses within the retro-palatine part
of the pharynx, usually designated by the term.
It is said that the soft palate may be projected
fowards: I have not been able to determine this, the space between the free borders of the palate and the posterior pharyngeal wall being so variable in normal throats, but admit its probability; certainly its movements may be very much restricted either owing to the growths behind it or to its own pedunculosity.

The pharynx is the seat of adenoids, and they are distributed over its entire surface. They are usually situated on the vault, but it may be clear, masses being found at the sides or on the posterior wall or round the orifices of the eustachian tubes. I have never discovered them on the posterior surface of the soft palate though they have been described as growing there. The septum nasi and turbinals are always free.

When seen the vegetations are of widely differing appearance in different cases. They may take the form of a large cushion; or of a mass of smaller coarsely lobulated cushions; or of separate lobulated or conical or polyvoidal growths. — singly and in the aggregate they may be insignificant in bulk, on the other hand they may well suffice the post-nasal space. — In colour they range from any hue of red to yellow, the latter colour being imparted by secreted or deposited material. When the Nature is unsatisfactory or unobtainable the state of the parts as regards size,
Size and consistence may be accurately ascertained by means of the finger hooked behind the soft palate. Such an examination should never be omitted if adenoids be suspected; for my own part I rarely now employ any other method. The consistence varies from that of jelly in some cases, to that of flesh in others; the former are probably more recent, the latter older and chronic; except in the latter variety bleeding is induced with the greatest readiness, in fact when the examiner fails to feel a growth the presence of blood on the exploring finger is deemed diagnostic of adenoids. These growths consist of lymphoid tissue covered by alined or stratified squamous epithelium.

I should have prefaced the foregoing paragraph with the remark that adenoids can only be seen by reflected light, occasionally by anterior rhinoscopy but oftener by pharyngo-rhinoscopy. I have not however met with great success by either method. Anterior rhinoscopy I have only seen employed for demonstration purposes and not in this country.

Causes.—Size. These growths occur in both sexes; from their nature it seems to me quite superfluous to inquire in what proportion they occur in each.

Age. — The condition is essentially one
of early life: for my own part, I would say it belongs exclusively to early life but the experience of others negatives such an assertion. Investigations of English school children have from time to time been made, the results seem to show that from 1 to 5 percent suffered from this affection. I am not in a position to say that in better class schools, 1 percent is incorrect, but I am of opinion that in a poor city neighbourhood 8 percent is below rather than above the mark.

At home and abroad I have gathered that the age at which adenoids generally occur is from 3 to 10 years. My experience leads me to differ from this statement. Younger children are seen by the general practitioners or go to general or to children's hospitals. Writers on children's disease, whatever be their practice, are accustomed to give very scant attention to the subject in their books; moreover, it is only recently that some of the less obvious symptoms have been taken notice of. So far as I can speak, many of the troubles from which infants and little children suffer are associated with the existence of adenoids. I remarked their prevalence before I became aware of their significance. That their association is not fortuitous I have proved in my own practice by the greatly improved results obtained since I directed treatment especially to the throat. The laryngologists and otologists rarely see these cases, but it is to writers on diseases of the nose,
throat and ear that we have to turn for the best published information on the subject. I have rarely seen a child of less than 3 or 6 years taken to an hospital or hospital department for the treatment of these regions— their patients are rarely as young even as that; and after that age cases of adenoids diminish with every added year. I consider that in great part explains the figure given, for I am decidedly of opinion that the vast majority of children seen at 5 or 6 years of age with marked adenoids had the adenoids when only—let me say—as many months old. In hospitals and it is there that most observations are made—there is not time in a crowded out-patient room to go minutely into the history of cases; here, however, that can be done. Ever since I first noted the prevalence of vegetations in infants I have closely questioned the parents of older children suffering from them who have come under my notice. As a consequence I have been able to trace back symptoms undoubtedly pointing to the existence of the adenoids in infancy in a goodly proportion of the cases, and in others to a time when the child was not more than 2 or perhaps 3 years old. In some instances there may have been for a time a subsidence of the symptoms, then rising perhaps to an attack of one of the septicemias, perhaps to a milder cause, preceded—rescence took place. It is these considerations which
lead me to contend that infancy rather than childhood is the age of adenoids. I prefer to consider childhood as the age of their more established consequences e.g. chronic bronchitis with pigeon breast, deafness, etc. Of course it would be futile to assert that adenoids do not also arise subsequently to the first two or three years of life.

After 13 or 14 I have comparatively rarely seen vegetations, that they are to be found in adults — even in middle life — is undoubted, but I have never myself seen a patient over 19 with them. It is said that adenoids disappear at puberty; this I regard as, in a sense, a partial statement, my belief being that their natural tendency is to shrink at all times and that it is only a maintenance of the instant producing them or the suppression of some other instant which prevents atrophy. Still puberty is undoubtedly signalled by the ultimate disappearance of adenoids in most cases. Presumably the atrophy of the pharyngeal gland is in a way analogous to the atrophy of the thymus. What physiological function it subserves I have never seen explained, but it seems to be rather a source of infection than a barrier against it. Some observers — notably Brodie — have remarked the similarity between warts and adenoids in respect of their common fate of disappearing about puberty and on that and other grounds have advanced the opinion that the vegetations are not glandular as
to generally described lent papillomatous. — There
is a common phenomenon which may or may not have
some bearing on the point, and to which I have never
seen any reference made. It is this, that many healthy
children free from all symptoms are mouth-breathers
though capable of nasal respiration for long intervals,
at puberty they become nose-breathers; such children
often have "snub" noses, coincident with the change
in respiration their noses sometimes become straight
or even arched.

Predisposition. — I think there are few who
will not say that the strumous constitution is from
its nature a likely cause of adenoids. That it is a
cause I believe, though many strumous children escape.
Apart from struma I do not regard heredity as a cause.
Vegetations are frequent in several members of one
family. I know of families where every child has
them and one of the parents may have the facies
of adenoids during childhood. But I think that
due rather to similarity of circumstances than
to any family predisposition. — Of course
the inherent cause of adenoids is the presence
of the third, fourth, or the pharyngeal tonsil.
It consists of follicular tissue precisely analogous
to the faucial tonsil, and it only requires the
necessary stimulus to be excited to growth.
Adenoids, therefore, are not new growth, but
by projection of tissue which is normally present
but atrophies.
Exciting. — As for the aetiots which act on this susceptible structure some of the exanthemata must be given a prominent place. Diseases of this type which I have seen as a cause of adenoids are as follows, and I give them in the order of their importance: — measles occupies a prominent place, followed by scarlet fever, diphtheria and whooping cough are of much less consequence. These diseases are all of microbic origin and in them the throat seems to be the seat of infection; all are in different degree attended by throat symptoms. — The growths frequently come into evidence after an attack of chouza. — Then follicular tonsillitis must be regarded as a common excitant, the pharyngeal as well as the faucial gland being involved in the process; adenoids once established are peculiarly liable to recurrent attacks of this condition. It is to be observed that chouza and follicular disease are both associated with the presence and activity of organisms. Each disease I have mentioned may be a primary exciting cause but in many instances is merely superimposed.

But I am inclined to look behind all these conditions to the insanitary state of dwelling rooms and more especially of sleeping rooms as the real origin of adenoids. It is an established fact that the state of the throat is an indication of the sanitary condition of houses; further that it is the children as opposed to the adults who suffer first or solely provided the chances of infection.
are equal. There are few, if any, of us who have not at some time slept in a badly ventilated bedroom, the room need not of itself be insanitary—and was lined with the dry sore throat which is the consequence of so doing. It is on going out, especially if the day be cold or raw, that one is specially liable after such an experience to an attack of pharyngitis or tonsillitis. But these are the very conditions under which our urban communities of the poorer classes habitually sleep, only the conditions are much worse, owing to the number in a single room and to the dirt within and without the house, than a member of the better housed classes ever experiences. Here then is there not ample for the production of adenoids? the sensitive respiratory passages of the infant, the sore throat producing atmosphere laden as it is with animal and other exhalations—replete with organisms—deficient in oxygen, the existence of glandular tissue easily excited to active growth, to these need only be added the personal predisposition. When I have the opportunity of practising amongst patients in comfortable circumstances I shall pay special attention to this point in houses where there is a large family of children of whom several may have to occupy one sleeping room; meanwhile, as I stated at the beginning of my paper, I have worked only in a district
largely given over to slum, so that my observations are incomplete, but the above facts have appealed so forcibly to me that I regard them as combining to supply the great cause of adenoids. I cannot regard it merely as a coincidence that it is from houses where filth reigns that the greatest relative proportion of my cases of adenoids come. Following these are the houses where a limited capacity has to accommodate a numerous family; the house need not be dirty, on the contrary, it may be well kept, but it is not large enough for the number of nightly inmates. My argument receives support from the fact—and in several instances I have made careful inquiry—that where the house is clean and the family large, the younger children may suffer from extreme infancy while the older ones do not suffer till much later if at all. From this the inference seems natural that the superimposition of adenoids when the house becomes overcrowded is not casual, but is a direct effect of the overcrowding and all that overcrowding implies.

Climate. A moist atmosphere has been given as a cause of adenoids. I find myself unable to express an opinion on the point; it is, however, undoubtedly the case that more patients with symptoms the result of vegetations come for treatment at times when respiratory troubles are rife than when these are in abeyance.
I have also noticed a perceptible increase in the number attending the dispensary during the often sultry weather of early autumn when the air is laden with dust etc.

— Symptoms. — There is no physiology more pronounced than that of adenoids. A typical subject of the disease is characterized by his broad flat nose extending without definition into the cheek, the skin of the having a peculiar waxen look, while the anterior nares are pinched and have a puckered appearance in consequence of the forced inspiration, or else of retarded development the result of partial denial of the organ. A mucoous — at times mucopurulent — secretion runs down the upper lip from each nostril, when of the latter variety it may by its irritating property set up an edematous condition; the lips are thick and pout; the mouth is open and from its angles a small stream of saliva often tends to run. The face expresses stupidity. Such a child is easily recognisable and is often seen on the street. Even if not seen the condition may with assurance be assumed to be present in a child who is heard to snuffle frequently and when speaking to stop between words in order audibly to —
such the excessive saliva from the teeth and lips; the speech is sloppy, and the nasal consonants become explosive; breathing is harsh if not more or less stertorous. In a patient afflicted to this degree the stertorous breathing always becomes annoying during sleep, though turning often occurs where the growth is very small indeed; and the saliva which is painfully prevented from overflowing the mouth during the day dribbles freely on the pillow and bedclothes at night. Short of this any condition may be present wherein one or more of these symptoms may be observable in varying degree. All these peculiarities are due to the obstructed, rarely occluded, air passages. Needless to say the sense of smell and taste depending on smell are impaired. Such a child too is a noisy and offensive eater.

But in the practice in which I have been engaged it is not for any defect of speech or aesthetic reason or other of the obvious appearances just detailed that one is consulted. It is for symptoms which may be grouped under the following heads that patients have been brought to me: general, alimentary, respiratory, cephalic, auditory.

General. A child is brought by its mother who says it is "wasting" or "it is not thriving" but can make no more definite complaint. As nothing very obvious is discoverable it is put on a course of
frequent complaint of headache, or it is restless sleeper and occasionally sneezes; perhaps it screams; further it may be observed that the mucous membranes present the pallor indicative of anaemia, or there is an enlargement of one or two cervical glands, or perhaps the tonsils are rather in evidence; one or more of these subjective and objective symptoms may be present. In all such cases it is imperative to explore the naso-pharynx, and in most of them vegetations will be detected and the finger will be withdrawn bloody. The discovery seems trivial, but from the consideration of cases these adenoids are the cause of the patient's debility and their removal will prove the most effectual cure.

Under this heading I may include a child's backwardness in speech. I have seen a girl of 3½ years who could only articulate about a dozen words, and these very imperfectly; there was only comparative deafness; the only cause discoverable was adenoid growths of large size. Besides the aphonia
she suffered from great dyspnoea during sleep and
snoring, dreaming and screaming fits were of
frequent occurrence, and she had several inflammato-
ry attacks of the throat. The parents declined
operation at the time.

Alimentary. Retching I find to be a
common complaint of patients who have
adenoids, accompanied by the greater degrees of
tonsillar enlargement. Cases of actual
vomiting I have met with too, but this has
always been started by coughing through the
cough may have been slight. — but is from
time to time consulted regarding an infant which
has to be spoon fed in consequence of having
developed inability to take the breast, perhaps
breast feeding has only to be supplemented by
the spoon as the little one after a few sucks falls
back into its mother’s arm and having been again
set to the breast falls back as before and gasps;
after this has been repeated a few times it refuses
with cries to take more, though it has not had
sufficient milk. As a rule one is asked if the
child be tongue-tied; I have never seen a case of
Tongue-tie. Beyond remarking that these infants
were terrible dribblers I did not used to be able
to make much of their case. My attention was
directed to adenoids as a possible explanation of
their symptoms in consequence of hearing from
a friend how he had given an anaesthetic to a
child 10 weeks old while its adenoids were enucleated, they were so large that the patient was quite unable to suck and their removal restored the function. Since then I have had two cases of the kind referred to and in both there were vegetations. The infant's difficulty is likely similar to that experienced by an individual suffering from croup; when respiration has to be conducted through the channel in which mastication is being performed one soon becomes conscious of a feeling of exhaustion.

In some cases there is an actual difficulty in swallowing, that complaint was once volunteered to me by a bright boy of 6 who was brought for a totally different condition — he had phlegm, on examining the throat the existence of adenoids was at once evident.

Respiratory. The most obvious symptom of adenoids under this heading is the embarrassment of nasal respiration which occurs in greater or less degree depending on the extent to which the choanae are blocked: there may be a complete occlusion of the choanae so that nasal respiration is suspended. It is to be remarked that expiration may be possible when inspiration is not. Such marked degrees of occlusion are probably less due to the blocking action of the growths than to the consequent turgescence of the turbinals.
I have already referred to the shortness of breath from which the subjects of adenoids suffer. This is due not alone to the impeded ingress and egress of air through the nasal passages, but also to the varying construction of the nasal passage in consequence of the so frequently associated hypertrophy of the fauces tonsils. Again, buccal respiration is more exhausting than nasal.

While still dealing with the post nasal region I would mention chronic catarrh – a posterior rhinitis as a very common symptom. The discharge may be so profuse as to obscure the back wall of the pharynx and even the tonsils. Such a condition often has its origin in adenoids and these of small size. It is very distressing and causes endless "hawking".

When consulted about an infant whatever be the matter with it, one is at times told that it has "the snuffles", a symptom which I have been taught to associate with congenital syphilis; it is one of the points always required into when a history of syphilis is being sought. So frequently does it exist where there is not another tittle of evidence to confirm the suspicion it is calculated to arouse that I have ceased to enquire about it in that connection. While not going the length of saying that it is not a symptom of congenital syphilis, I do not hesitate to describe it as a symptom of adenoids which, if not congenital, arise...
Adenoids sometimes cause a feeling of a foreign body in the throat. At the time of writing I am attending a girl 3½ years old who beautifully illustrates this; after nearly every fit of coughing—she is suffering from an inflammatory exacerbation of fairly large adenoids—she tries to thrust a hand into her mouth as if to draw something out. On immediately examining the throat it is found to be free of the sticky mucous to which such a sensation is often due.
during the first week or two of life.

It is always well in cases of haemoptysis occurring about the age of 16 or 17 to examine for adenoids. This is one of many symptoms common about them which excite fears of phthisis, and much alarm will be allayed if these growths be found the source of the haemorrhage.

A functional effect of adenoids already referred to is seen in marked engorgement of the spongy tissue of the turbinate bodies; but they may even cause a structural change, the bodies becoming actually hypertrophied.

The hypertrophied tonsils and hypertrophied fauces are peculiarly subject to subacute inflammatory attacks, so that pharyngitis etc. is frequent. In bad cases of this kind the symptoms are at times severe and suggest that the head is the seat of the trouble. Even in the absence of such subacute attacks the fauces are irritable, and a hacking cough easily excited may persist for prolonged periods.

Respiratory spasm is a condition which is not due to adenoids is very frequently associated with them. It is readily elicited by an attempt to see the fauces; I have seen it caused in several instances by a fit of anger.

Bronchitis is an extremely common accompaniment of adenoids. While during the exacerbations there is ample fluid in the tubes
as evidenced by the bubbling rales to be heard all
over the chest, a daily condition - to be recognized by
the coughing rales - is in some cases present throughout
the intervals. There is an intimate connection
between the state of the upper and lower respiratory
passages, the exacerbations of the former being
accompanied by exacerbations in the bronchi. The
cough which accompanies the latter state is
always distressing and gives parents the idea
that the child's condition is more serious than
is the case. It comes on in paroxysms which
leave the patient fluid and exhausted; it may
consist merely of a diminuendo series of
explosions, but is often croupy or "whooping"
in character; - in fact, on asking the mother
of a child seen for the first time what is the
matter, one is often told that it is suffering
from whooping cough. This condition of
bronchitis with an adenoid pharynx is easily
distinguished from croup, but is not so easily
distinguished - provided the vegetations be not
manifest - from whooping cough; but in the
latter there is not the same enlargement of the
tonsils, the fauces have a more asphyxiated look,
the sputum is more glary and less mucopurulent,
then the quality of the cough does differ: of course
whooping cough occurs in children suffering
more or less from vegetations. The paroxysms
may end in vomiting; that the cough of bronchitis
uncomplicated may go end I Know, also that it is apt to be paroxysmal, but I have found the characteristics above described specially associated with the state of the respiratory track due to adenoids.

As a result of chronic bronchitis there follows an alteration in the form of the chest, marked by an indrawing of the ribs at the attachment of the diaphragm; the effect of this is a constriction below the nipples giving the appearance of a highly situated waist.

I have not yet come across a case of chronic bronchitis in a child which was not a consequence of adenoids.

Aphonia. Head symptoms associated with adenoids are sufficiently common. The most usual is a feeling of fulness in the head, or there may be a definite headache generally referred to the glabella. That headache should be a prominent symptom is only to be expected; adenoids, which are situated just at the base of the skull, cause so great a change in the vascularity of neighbouring structures that the lymphatics and arterioles at the base of the brain cannot escape engorgement. In many cases, however, there is some auditory complication—deafness or tinnitus—to which the headache may in reality be traceable.

A symptom called aprosnesia has been described. The term is intended to convey inattention, lack of concentration and stupidity. Certainly many patients with vegetations answer to the description, but I don't know if it is not simply a manifestation of the general ill health of the condition; the want
of concentration is not greater than may be accounted for by the headache, and the stupidity is not more than deafness may cause.

I have already made reference to dreaming as a frequently associated condition. This, like headache, is probably owing to the altered state of the vascularity of the brain. An analogous but more exaggerated symptom is fits of screaming during sleep; these may occur alone or in conjunction with dreams. I have never succeeded in getting an account of the sensations of a child immediately preceding a fit of fright-terror, but I do not think a horrible dream is the necessary precursor of such an attack. It is, however, quite possible that the child may have experienced a feeling of strangulation. All cases of the kind I have yet seen have been in patients with large vegetations in whom dyspnoea during sleep was extreme, so much so that their parents had to frequently change their position in bed and prop them up. Nothing stops a screaming fit like setting the child up, and a sip of cold water is helpful as an addition. I think it likely that screaming is the result not alone of alteration in the vascular system at the base of the brain, but more of the circulation of blood from which the carbolic acid has been imperfectly removed in consequence of deficient aeration.

That not a few cases of infantile convulsions are due to adnoids I am firmly convinced. That it should be so is theoretically obvious. From time to
time I have seen children who had had convulsions when there was no evidence pointing to any of the causes commonly ascribed, but who certainly had adenoids. — On one occasion I was sent for to see a boy 6½ years of age; his mother was very anxious about him as his health had never been good. She gave the account that he had been ill for nearly a week, that he always wanted to lie down and burrow in the pillow as his head was painful, that he had been convulsed, that he had vomited frequently, that he had become much worse during the night and was unconscious; she added that he had a quite similar attack nine months previously, and was then treated for inflammation of the brain. He had a temperature of 103.2° F. and presented the superficial appearance of a head case, but there resemblance ended. There was nothing the matter with any of the systems except that he had some bronchitis and undoubtedly adenoids. Enquired most carefully into the symptoms of the previous illness and concluded that there had been no disease of the brain or of its membranes; I believe that then as when I saw him, he had acute follicular tonsillitis involving the pharyngeal mass. He was treated for the condition described with satisfactory results; subsequently he had his adenoids scraped. A year later he had all the appearance of a strong healthy boy. — A little girl nearly 5 years old whom I saw when the boy just referred to was still under treatment,
presented very similar symptoms and only the same conditions could be detected in her case. Her mother, an intelligent woman, volunteered the statement that an other child had died in hospital from tubercular meningitis, and that when this one took ill she thought she recognized the same disease. In this case, as in that just mentioned, there was no room for supposing that it might be one of those subacute attacks of basal meningitis which have been described that the child suffered from, though there was probably a temporary congestion.

Auditory. The commonest auditory result of adenoids is deafness which may exist though the vegetations are of very small size. The symptom seems to be due to obstruction of the Eustachian tube from pressure of the surrounding hyperaemia, or more probably from hyperaemia of the ciliated mucous membrane of the tube; as a consequence the equality of air pressure on the two sides of the tympanic membrane is lost and the membrane becomes indrawn; the condition is specially noticeable in the posterior segment where quite a pocket is formed, this throws the handle of the malleus into relief, other bony points also may become prominent. Middle Ear disease is an only too frequent consequence of these growths, for it is the gravest. This condition is also due to the obstruction just referred to where by the tube becomes a cyst, or else it arises from an extension up the tube of
some inflammatory state which has been excited
in the nasopharynx.

From time to time one meets among adults
with a very distressing malady consisting of
defauness, giddiness and noises in the head con-
sequent on a dry catarrh of the middle ear and
closure of the eustachian tube. That it should
be a result of adenoids in childhood seems highly
probable in many instances.

An important symptom is earache, for
it is often a precursor of suppuration.

--- Diagnosis. ---

The diagnosis of
adenoids need never be a matter of difficulty. As
already mentioned the condition is in not a few
cases written, as it were, on the features. In
other cases the sneezing almost suffices to found
a diagnosis on. For the rest one gets at the
condition by a process of exclusion. It is at
all times interesting to employ rhinoscopy
if the patient be old enough; the anterior
nares should always be examined for deviations
of the septum and for hypertrophy of the bodies.
In no case ought an exploration of the naso-
pharynx by the finger to be omitted, for the
condition prevailing there is at once decided,
and information necessary for determining
the requisite treatment obtained. How of
no condition which can be confused with adenoids.
Treatment

Treatment is determined by two considerations: first, the age of the patient; second, the state of the growth and its attendant symptoms. The latter of these is out of sight the more important, but it has too often to subserve the former. It is still widely declared that in the case of patients under 5 or 6 years adenoids are to be treated by tonics with probably local applications, from that age the curette may be employed if the symptoms justify or require its use. From this view I dissent entirely. I am strongly of opinion that no consideration of age should prevent operative treatment if the symptoms seem to call for it. The symptoms which I regard as requiring operative treatment are as follows, and they should be watched for in patients who are known to have adenoids; I apply them to all ages.

a) Continued delirium for which no other cause can be found: under this may be included screaming, apnoea, etc. because where these are present there is certain to be more or less delirium. It seems to me absurd that a patient, especially a delicate child, should be allowed to continue in bad health when clearing out the naso-pharynx gives every chance of picking up; but that is what the treatment of children with cod-liver oil and 20. in very often amounts to. In these cases a slow change
may be taking place which will cause mischief of hearing later on; further, in the event of the child contracting one of the exanthematica, the throat condition and its consequences will certainly be much aggravated by the existence of vegetations. (b) deafness and (c) larynx: these are best taken together because while distressing symptoms of themselves, and deserving operative treatment on that account, they are so frequently indications of inflammation threatened if not actually established in the middle ear; and otitis media is too serious a condition in its possibilities to risk for want of scraping out the nose-pharynx. In young patients it is often a matter of great difficulty to obtain a view of the membrana tympani so that one is deprived of its appearance as a guide to what is internal to it, and of course polarization is out of the question. In such little patients the only indication of the threatening mischief to get from their behaviour—crying which may be redoubled if the auricle be handled, raising the hands to the head, Sleeplessness, an elevated temperature—though this indication may be absent in a catarrhal as opposed to a purulent affection; these symptoms should overrule all hesitation as to the advisability of immediate operation.

(c) hæmorrhæa. When perforation of the membrane has already occurred it is futile to expect a ready
cure, or that the cure will be permanent, if the growth, the root of the mischief, be not cleared away, and patients run infinitely more risk from a torrnoea than from the operation. I have often had occasion to remark the indifference with which so many parents regard "only a running at the ear" in their children; they will allow the condition to go on for months or years with merely occasional lapses into two or three weeks of treatment. Once the neglections are got rid of the a torrnoea is most amenable to treatment as a rule.

e. Post nasal catarrh is generally very obstinate when treated only with applications of adenoids to the cause of it, so that operation would be indicated even in the absence of the possibility of the catarrh extending up the tubes.


There must be many cases in which, for purely aesthetic reasons an operation at an early age is advisable; but in the practice I have so far conducted that point has never come up for consideration. A child which has become an habitual mouth breather sometimes finds it difficult to respirate through the nose even after all obstruction has been removed; so that there will be instances in which a little foresight in this relation on the part of a medical man — even if the symptoms be very trifling — will spare sensitive mothers and children a good deal of annoyance.
One meets with many cases where an operation would be preferable to other treatment, but where it would be refused if proposed to the parents, or else where the immediate symptoms do not urgently call for it; these cases are especially frequent in infants. Then it is my custom to pass the index—more often the little, finger into the naso-pharynx, and give the growths a scrape with the nail. Such treatment rarely fails to relieve the symptoms; that it should effect a permanent cure is not to be expected, but it may do so in not a few cases,—to express a decided opinion on the point I would need experience extending over more years than I have yet had. I fancy the good effect does not follow so much from the partial removal of the growths, which may be of small size, as from the vascular relief afforded by the ensuing bleeding. To carry out this method of treatment one required a little practice, a curious finger, and a nail of average length and strength which should be scrupulously cleaned before inserting the finger. The scraping may be done in the course of an examination. Should it be undertaken in consequence of larynx the application of iodine or blistersing fluid in front of and behind the auricle is beneficial as an additional measure.

For the rest treatment is medicinal and operative. The former consists in the administration
of tonics such as sodium oil and stout wine or syrup of the iodide of iron, combined with local applications to encourage the natural process of shrinkage. The only local applications I have employed have been kerosene or dilute solution of glycerine or water—depending on the age of the child and the state of the pharynx—isodised glycerine (iod. p. vi, pot. iod. p. xii, glycerin ad 3i v. ml 3i), and nitrate of silver points. These remedies in certain cases have proved very efficacious.

The operative treatment of adenoids is various. In Vienna 5 years ago I saw the wire scare employed, it was a favourite with Chianti; it is all right where there is distinct tumour growth, but I do not care for it, never having been able to make anything of it. A preferable instrument is the forceps of which Hänsser's pattern is the standard, and Worsell's an excellent modification. Many operators rarely use anything else and it is the most generally serviceable instrument. For my own part I think it is best used in conjunction with the curette. Of the many varieties of this instrument my own preference is for Drucker's modification of Cattel's resect knife for use through the mouth. The curette does not get satisfactorily at growths situated at the side of the post-nasal space and in what I may call the angle of the vault, for these the forceps are
useful; then again when the vegetations are chronic and have become more or less fibrous the mass of the tumour is best removed by the forceps as a preliminary to curing its base. While this instrument be used the finger should always be employed afterwards to examine the cavity for pieces that may have escaped; these can then be scraped off with the nail as can the shreds of mucous membrane which is apt to be slightly stripped in places.

In many cases the finger nail would suffice for the entire operation, some adjust an artificial nail, but it need not be used except as I have now and previously mentioned.

It is often remarkable how little there is to show at the end of a successful operation even though the symptoms may have been marked; probably they have owed a good deal to the surgesence of the inferior turbinals which generally subsides, but cauterisation is occasionally required. A frequent necessary preliminary to curing is excision of the faecal toulis; I have been accustomed to see them removed at the same time, but some prefer to operate on them a little while before proceeding to clean out the vegetations.

In operation I have been warned against the two extremes of removing too much and of not taking away enough. The former I have only seen in books quoting from the teaching
of the Vienna school, and 5 years ago Gruber taught that vigorous curettage was not to be practiced. It is objected that too much scar tissue may be produced leading to a dry cataract which may extend up the c Hallerian tubes. If any, the objection is theoretical; whereas such an complication of the tubes occurs it is more likely to be the result of the vegetations than of the measures taken for their removal. I have seen operators whose thoroughness staggered the onlooker, but I never heard that a greater number of such cataractal symptoms ensued in their cases than in those of others. Personally I think there is no occasion to remove more than the masses of growth; it seems better surgery than blindly denuding the whole pharynx of its mucous lining and the subjacent tissue. To effect the necessary, but not more than the necessary, removal of tissue the finger should be passed in with the instrument — forceps or curette — to guide it. What one anticipates where curettage is insufficiently done is recurrence; I have never seen a case though I believe they are not so very uncommon.

I am aware that the operation has been attended by accidents from blood and pieces of the growth getting into the trachea, but I have never seen anything of the kind, and should say that with ordinary care no accident need happen now that
the risk is known. Of course this can only occur when the patient is anæsthetised. Should chloroform or ether be necessary for any reason it is well to have the patient's head hanging over the edge of the table during the operative manipulations. In hospital and out-patient practice, with which I am alone familiar, a general anæsthetic is rarely given; the operation is so quickly performed that it is scarcely necessary. To perform it, however, with the exactness which I think is best to be observed an anæsthetic is essential as consequence of the time required. — Because renders the tonsils insensitive, but in my experience does little more than blunt the sensibility of the pharyngeal growth.

As regards after-treatment I do not employ any to the parts operated on. The only trouble I have seen follow was in a case where septic absorption occurred owing to the discharge from a pharynx running over the raw surface. The throat presented an appearance which at first suggested diphtheria. The state of the auditory apparatus, however, frequently calls for pollichination; and it is always advantageous to give the patient a tonic such as codlin oil or syrup of the iodide of iron.

That the operation is beneficial does not admit of doubt; in fact I know of no
operative procedure of which the same can be
so confidently said, for I have not yet seen a
failure. Certainly for a day or two the headache
may be more severe and the stuffiness—in the
milder cases—increased, but from that time
onwards the good effects are obvious to
anyone.

W. Churchill, M.C.:  

Note. I find myself unable to give references in the
foregoing paper as many of the facts mentioned are so
embodied in the literature of the subject that it
would be extremely difficult to trace them to their
original source. I take the responsibility of all the
statements, as I have not mentioned anything that
has not fallen under my own observation except in a
complementary manner and then I have endeavoured to
make it clear in the text.

In addition to gaining information in outpatient rooms
in Edinburgh, Dublin, Glasgow and London I have at different
times during the past five years read the following books
which accord much else treat of the subject—

Diseases of the Ear, Nose and Throat by Grimley, M'Parrie,
M'Donald, M'Nab, M'Wha and M'Kenzie—

Diseases of Children by Gustave Smith, Ashley and
Dwright, and parts of Cumberbatch's Cyclopedia—

General Text Books e.g. Fagg Medicine and Surgery—

Waley's paper in the Medical Chirurgical Transactions—

Papers in the Journal of Ophthalmology and Anatomy—

During the past five years—