

move about from one town to another or from one part of a town to another so often that the bond between doctor and patient, which is purely personal, is broken by the force of circumstances, facilitating the entrance of newcomers into practice and diminishing the advantage of the established man. The result is that though there is as much or more money earned in general practice as at any time, it is divided among a larger number of competitors, and younger men get a larger share than they used to do. One of the causes of the instability of general practice is the disappearance of the partnership system. The inability of medical men to work together as partners points to a defect in their training which results from the lack of discipline in early life formerly afforded by apprenticeship, and is to be regretted, as a partnership prevents the break-up of a practice that otherwise occurs at death and makes it easier to take holidays or to tide over a serious illness. While in country districts the motor car is a great help, diminishing the doctor's toil, saving his time and widening his range of rounds, it may bring him into competition with the practitioners of the neighbouring town who may come out to attend some of his best patients, but on the whole it is a great boon to the country practitioner, opening up possibilities of earning a larger income with less expenditure of toil and time, and finally saving him from a great deal of the hardship and exposure that cut short the lives of many good country doctors. If the incomes earned in general practice have diminished mainly in consequence of competition inside the profession, it is also true that special practice attracts many of the best men who formerly entered general practice. This must have an effect upon the standing of the general practitioner. If to this be added the conversion by legislation of a large proportion of the population into contract patients, the temptation to enter general practice will become still less.

The provision of medical aid by some kind of insurance is no new thing, and its existence bears testimony to the thrift and independence of the wage-earning classes; but the mode of payment by capitation fees is bad, because it does not take into account the varying needs of the sick, and suits only those practitioners who are content to dispense drugs wholesale without wasting time on diagnosis—a mode of conducting practice which, unfortunately, suits the prejudices of the working classes, who only want a bottle of medicine and hate to be examined. This is what contract practice means, and if that is to be the general practitioner's fate, I advise you not to become one. Such work is not fit for highly trained medical men, and if Parliament sanctions such a scheme it will be served by the worst educated members of the profession, and must lead to the evolution of an inferior class of practitioner.

My advice to you is to keep out of contract practice, and if you follow my advice I am sure you will not regret it. Do not be tempted by the offer of an income that can only be earned by the sacrifice of all your ideals and by the loss of your self-respect.

In conclusion, let me again thank you for inviting me to address you, and ask you to accept my earnest wishes for the continued success and prosperity of the Royal Medical Society of Edinburgh.

THE annual dinner of the Huddersfield Medical Society on October 18th was marked this year by a presentation to one of its past presidents, Dr. Norman Porritt. The presentation was made by Dr. Irving, who, after giving some account of Dr. Porritt's career, added that when he left Huddersfield he would carry with him the affectionate regard of all his patients and the goodwill and esteem of every member of the medical profession who had ever come into contact with him. The presentation took the form of two pairs of silver candlesticks, to which were added some silver vases for Mrs. Porritt. Dr. Porritt, who has been in practice in Huddersfield for some thirty years, has held the offices of President of the Huddersfield Medical Society and Chairman of the Huddersfield Division of the British Medical Association. He was a Leeds student, and a very few years after becoming M.R.C.S. and L.R.C.P. was awarded the Fothergillian gold medal of the Medical Society of London for his essay on the operative treatment of intrathoracic effusion. He was also one of the earliest medical men to appreciate the advantages of shorthand, and for some years past has been treasurer of the Society of Medical Phonographers. His retirement creates a vacancy on the surgical staff of the Huddersfield Infirmary.

ON CERTAIN CLINICALLY OBSCURE MALIGNANT TUMOURS OF THE NASO-PHARYNGEAL WALL.

BY

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ON account of the supposed difficulty of obtaining really adequate access to the naso-pharynx, the diseases of that region, apart from certain trivial and easily treated conditions, have aroused comparatively little interest. The only tumour originating there which is at all familiar is the naso-pharyngeal fibroma—a condition which always develops in the least inaccessible part of the space and can invariably be removed without complete exposure of the part. Nevertheless, the naso-pharynx is a region rich in pathological interest and subject to the growth of numerous tumours, which are by no means infrequent and are of great diagnostic importance.

I propose to direct attention in this paper to one class of these growths, which, while it produces a clinical picture singularly precise and characteristic, is no less singularly liable to give rise to errors in diagnosis.

Pathologically considered, the tumours of the naso-pharynx may be grouped as follows:

- Teratoma.
- Tumours originating in lymphoid tissue—
 - Lymphosarcoma.
 - Myxoma.
 - Myxosarcoma.
- Periosteal growths—
 - Naso-pharyngeal fibroma and fibrosarcoma.
- Sarcoma of the pharyngeal wall—
 - Homogeneous forms: Round cell, spindle cell, etc.
 - Alveolar: Endothelioma.
- Carcinoma of mucous membrane—
 - Squamous.
 - Columnar.

We are not concerned here with the pathological aspects of the subject, so that no detailed discussion of these various classes need be attempted. Some estimate, however, of the relative frequency of the various growths may be made. My own experience is not large enough to justify a statement of frequency in percentages, being confined to eight cases in which radical operation has been attempted, and some five or six others seen under various circumstances. From this small experience the outstanding fact is that endothelioma is by far the commonest malignant tumour of the naso-pharynx. So marked is this predominance that one may expect any given malignant tumour to be of this structure, and must reckon on the peculiarities of such growths in working out the requirements of diagnosis and treatment. A second outstanding fact is the very great frequency with which males are affected as compared with females. I have seen one case only in a woman. Finally, malignant disease of the naso-pharynx is a disease chiefly of the young adult, the age limits of 18 and 35 years including the great majority of the cases.

For clinical purposes the cases may be divided into those in which the tumour projects markedly into the cavity of the pharynx and those in which this polypoid development is absent.

The former class is of but little diagnostic interest. The symptoms of haemorrhage, alteration in the quality of the voice, and nasal obstruction will be early and well marked, and the diagnosis is perfectly straightforward. In the cases with little or no internal projection the position is very different. The diagnosis is entirely dependent upon the recognition of the symptoms of infiltration of the naso-pharyngeal wall, and my experience would tend to show that these are by no means widely known or correctly estimated.

The class of infiltrating tumours without marked projection is nevertheless relatively large and strikingly homogeneous. I have operated on some six cases, and have seen two or three others. All the cases presented remarkable similarities, and were usually recognizable at a glance. In each case the tumour was an endothelioma, and was situated in the lateral wall; in no case

was the evidence of obstruction of the naso-pharynx at all pronounced, and I may add in no case was the diagnosis made until an advanced stage of the disease had been reached.

ANATOMICAL CONSIDERATIONS.

In order to bring out the very characteristic clinical features of this class of tumour it is necessary to recall the anatomical relations of the part of the naso-pharyngeal wall in which they are found.

The lateral wall of the naso-pharynx on its inner aspect presents the triangular orifice of the Eustachian tube, having below it the prominent Eustachian cushion formed by the levator palati muscle. It is this region of the pharyngeal wall which is particularly affected by the tumours we are considering. If a dissection is made here, proceeding from within outwards, the removal of the mucous membrane discloses the Eustachian cartilage and the levator palati muscle; external to these is the inferior division of the fifth nerve, and external to this again the internal pterygoid muscle.

The tumour appears to start in the substance of the pharyngeal wall. Consequently it early involves the Eustachian tube, causing deafness; the levator palati, causing defective mobility of the soft palate on the same side; and the inferior maxillary nerve, causing neuralgic pain in the ear, the side of the head, the jaw, and the tongue. Further progress of the disease leads to closure of the jaws through involvement of the internal pterygoid. The strictly anatomical distribution of the symptoms is always a striking feature, and it should be noted that, owing to the nearness to one another of the structures involved, symptoms so diverse as deafness, trigeminal neuralgia, and an affection of the palate might be produced by a lesion no larger than a walnut.

SYMPTOMS.

Some further analysis of these symptoms may now be given. Deafness is generally the first to appear. It is of the Eustachian tube type, and may be relieved temporarily by inflation of the middle ear. There is nothing inherent in the state of affairs to make inflation of the ear or passage of a Eustachian catheter impossible, though in one of my cases Dr. Law, who kindly referred the patient to me, was led to suspect the nature of the case by finding that the catheter could not be passed. The deafness is not necessarily at all an outstanding feature, and may not attract attention unless examined for.

Pain always has a distribution strictly corresponding with that of the fifth nerve. In one case, corresponding in general type with the others, it seemed to have begun in the second division of the trigeminal, and here we must suppose the growth to have extended slightly into the nose and then penetrated outwards into the sphenomaxillary fossa, a variation in the spread anatomically quite comprehensible.

In all the other cases the pain was in the early stages limited to the inferior maxillary nerve, and therefore felt over the side of the head, in the ear, along the lower jaw, and in the tongue.

At first no alteration of sensibility can be made out, but after some months some defect can usually be shown, especially in the tongue and the area of the mental nerve. The pain is very severe, and, as it appears as an apparently isolated phenomenon, the other signs already present being very slight or being regarded as unconnected with the pain, the diagnosis of trigeminal neuralgia is usually made. In one case so little dependence upon any organic disease could be made out that the patient was treated for some time by suggestion.

The affection of the palate is of considerable interest, for it is not produced by paralysis, the mechanism usual in the cases familiar to the neurologist. It is, in fact, due to a direct involvement of the levator palati by the tumour which is particularly prone to infiltrate muscles. Hence the first effect is a diminution in the extensibility of the muscle, so that while during elevation the palate is symmetrical, as the muscle can still contract, during rest it is asymmetrical, because the muscle cannot relax. Relatively late in the case oedema of the same side of the palate develops, and this may cause some defective elevation.

The closure of the jaw is usually so late a manifestation that it has relatively little interest.

Enlargement of the cervical glands is a constant feature in late cases. The disease in the glands has the usual characters of these endotheliomata, such as an especial tendency to involve and infiltrate muscles. The glands involved are the deep cervical, and they frequently form swellings behind the pharynx.

DIAGNOSIS.

When the significance of the combination of deafness, neuralgia, and an affection of the palate is understood, there can be little danger of these cases escaping notice. It may be laid down absolutely that no single lesion except one in the lateral wall of the naso-pharynx can produce these three symptoms in association.

Once suspicion is aroused, digital examination of the naso-pharynx usually settles the diagnosis at once. It must be remembered, however, that no pronounced pharyngeal projection may be present, but merely a hard, nodular infiltration of the tissues about the Eustachian tube. Sometimes a sufficiently deliberate examination to make the diagnosis certain cannot be carried out without the use of a general anaesthetic.

From the diagnostic standpoint, these cases seem to be of especial interest to the otologist and the neurologist. The need for careful investigation of the naso-pharynx in cases of Eustachian deafness is more than ever obvious in view of these conditions and the fact that they may reach a very considerable development without causing any striking nasal obstruction. Again, the association of chronic deafness with persistent neuralgic pain should always give rise to the suspicion of some serious underlying condition. It is especially, however, the neurological aspects of these cases which seem to me of interest, and I would lay particular stress upon the importance of very carefully looking for deafness or affection of the palate in any case which is ostensibly one of trigeminal neuralgia beginning in the third division, specially in young adult males. We have seen even that occasionally pain of this type may begin in the second division.

Again, a careful examination for alteration of sensibility in the face receives from these cases a further confirmation of its recognized importance. Some caution, however, is necessary here. It must be remembered that these growths have a very strong tendency to extend upwards through the foramen ovale, and involve the Gasserian ganglion. When a case, ostensibly one of trigeminal neuralgia, is found to show some alteration of sensibility in the area of the nerve, the possibility that one has to do with an endothelioma of the Gasserian ganglion will naturally be considered. Should an operation for the removal of the ganglion be undertaken in one of the cases we are considering, the ganglion may indeed be found implicated in an endothelioma, and yet the true nature of the case be wholly overlooked. Under such circumstances the primary naso-pharyngeal tumour will, of course, go on developing, and will probably be incorrectly regarded as a recurrence of the growth in the ganglion. It would seem that there is considerable reason for believing that a number of cases which have been regarded and treated as primary endotheliomata of the Gasserian ganglion have in reality been cases of infiltrating naso-pharyngeal growths running the obscure course which we have seen to be normal for them.

One further diagnostic difficulty must be mentioned, and that is given rise to when the involvement of the glands is excessive, and altogether overshadows the symptoms of the primary growth. It is not improbable that a proportion of the common cases of glandular tumours in the neck without discoverable primary lesion are instances of the condition we are considering. I have had to deal with one such case in which the ultimate development of involvement of the Gasserian ganglion made it obvious where the disease must actually have originated.

PROGNOSIS AND TREATMENT.

This paper is intended to be principally concerned with matters of diagnosis. A word may, however, be added with regard to prognosis and treatment.

Owing to the obscurity of the early stages of the disease, it has not been possible to secure freedom from recurrence for longer than fifteen months in any of the cases operated on. There is every reason to believe, however, that a general recognition of the clinical features of the disease

would permit of its being attacked at a stage when a permanent cure might be obtained.

With regard to treatment, some little experience has convinced me that there is only one method capable of giving access to the naso-pharynx adequate for the free removal of these tumours, and that is osteoplastic resection of the upper jaw. The classical operation in which the bone flap includes only the maxilla does not, however, give so satisfactory a view of the parts concerned as a modification which I use. This is to include in the bone flap the malar bone with the upper jaw. No one who has practised or seen the two operations could have any doubt as to the great gain obtained from this extension of the flap. The operation, although formidable in appearance, is easy to carry out, is not dangerous in itself, and leaves no deformity.

In conclusion, I would refer once more to the extreme clearness of the clinical type presented by these cases of infiltrating endotheliomata of the naso-pharynx, to the exact anatomical distribution of the symptoms, and to the frequent absence of any of the symptoms usually regarded as those of naso-pharyngeal tumours.

DEVIATIONS OF THE NASAL SEPTUM AND THE SUBMUCOUS RESECTION OPERATION.

RECORDS OF ONE HUNDRED CASES.

By J. WALKER WOOD,

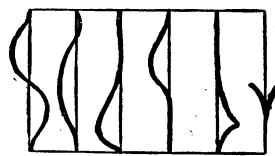
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DEVIATIONS of the septum to one or other side are extremely common. A strictly vertical septum is rare. Morell Mackenzie examined 2,000 skulls, and found asymmetry of the septum in 77 per cent. of skulls examined. Many other observers who have studied the nasal septum have also noted this asymmetry, and their figures bearing on this subject vary from 96 to 53 per cent.¹ In the lower races of mankind a deviated septum is the exception, being only found in 20 per cent. A vertical septum is the rule in the lower animals, deviation being almost unknown. In the Anglo-Saxon race the deviation is more often to the left side than to the right. This has been explained by the fact that most of us use the right hand in blowing the nose, and that, unconsciously, the tip of the nose is bent to the right, throwing the cartilage over to the left side. This statement is open to the objection that in the skull of the Gibraltar man (of the early Neanderthal type) found at Gibraltar in 1843 there was a marked deviation of the bony septum to the right. Also the skull of a short Cist man found in Aberdeenshire showed a very marked bony deflection with a compensatory enlargement of the middle turbinal bone of the opposite side. These two skulls take us back several thousand years, when I doubt very much if pocket-handkerchiefs were in use. I think it is more probable in both cases that the deviations were traumatic. In the last-mentioned skull I am quite sure that its possessor suffered from marked nasal obstruction.

In the adult a certain number of deviations are due to traumatism, as falls, blows on the nose while boxing, etc., but by far the largest number of deflections are due to faulty development of the upper jaw and bony palate in early childhood, a result of mouth-breathing consequent upon the presence of adenoids in the naso-pharynx. A certain small number of septal deviations may be wholly congenital.

In attempting to classify deviations, apart from their origin, I have divided them into two main groups:

TYPES OF DEVIATION



A. B. C. D. E. F. FIG. 1.

from above down or from behind forwards (see Fig. 1). B. Deviations of the simple type (above) associated with overgrowth of certain parts, hyperostosis, hyperchon-

drosis (spurs, crests, and projections). Overgrowths of this kind are usually found where bone and cartilage or bone and bone meet (see Fig. 2). Apparently they

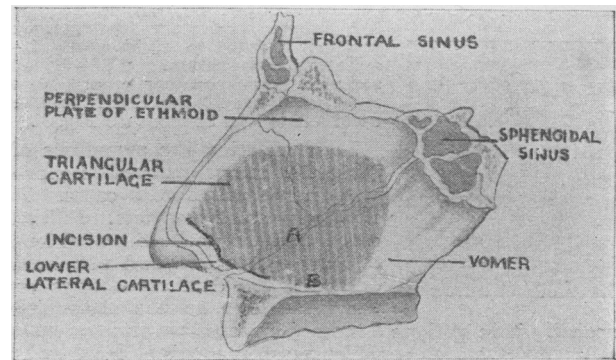


Fig. 2.—Nasal septum. Shaded area shows parts usually removed by a submucous resection. A, Site of vomerine crest. B, Maxillary crest.

are due to the separation of periosteum or perichondrium by accumulated blood at the time of the accident, and subsequent inflammation and irritation resulting in overgrowth. Certainly these forms are more frequently met in cases with a history of trauma than in those without. The observation and study of a large number of nasal septa at all ages has led me to form the opinion that the slow, gradual, but constant, upward pressure of the developing jaw is more likely to produce a bending or dislocation of the component parts of the nasal septum than to fracture them. It is reasonable to suppose that sudden external violence would in all probability cause fracture of some part (other than the cartilage) rather than a bending or deviation of an elastic, resilient structure, such as the triangular cartilage. Unless the cartilage be partially ossified, as sometimes it is observed to be, it is difficult to imagine how fracture could take place. Fractures of the vomer are rare, but fracture of the thin, papery-like perpendicular plate of the ethmoid is frequently seen. Dislocations are very common. Both are the origin of a hyperplastic periostitis, resulting in the formation of a crest or spur or thickened septum, hence nasal obstruction.

Deflections of the septum are seen at all periods of life and in both sexes. Statistics obtained from my own cases show the average age when advice is sought to be 30.5 years. Deviations are rarely seen in children under 7 years of age, and these deformities appear to reach their maximum development between the fourteenth and twenty-fifth years. Sex apparently has some slight influence, for in the 100 cases which I am now considering 62 were males and 38 females. No doubt the male nose is more likely to suffer injury than the female.

When should a deviation be corrected? Only when symptoms arise which can be traced to the deviation as a likely cause. These symptoms include headaches, obstruction, deafness, and laryngeal troubles.

1. *Nasal obstruction* may be of two kinds—inspiratory and expiratory obstruction. Of the two forms, the inspiratory is apparently the one most frequently complained of. While both forms are usually found to be present on the same side, it may happen that one form is present on one side, the other being present on the opposite. This may be understood readily by considering the site of the obstruction. Obstruction to inspiration may be due to (a) blockage low down close to the vestibule (septal), (b) blockage high up above the level of the inferior turbinate, or opposite the middle turbinate (septal). In this form the associated symptoms are obstruction and headache, but the symptoms special to this form of obstruction are all related to the larynx and its surroundings. Obstruction to expiration is caused by some blockage of the inferior meatus of the nose (the chief channel of the expiratory air current). This form is not so frequently a source of complaint, although it is more often associated with disease of the ear. It may be accompanied with headache.

Patients do not usually themselves differentiate between these two forms of obstruction; the fact is more often elicited by the rhinologist while conducting his examination. At the same time, I have found the complaint of "stiffness" to be more likely due, to expiratory obstruct-