CHONDROMA OF NASOPHARYNX

By PETER TIMMIS (London)

THE nasopharynx is one of the two sites in the pharynx where benign cartilaginous tumours arise—the other being in the tonsillar area. They are very rare tumours and in the last 80 years only nine cases have been actually reported. The first was in 1870 by Muller.

Usually this condition appears in young people, commonly by the time they are 18 years, and hence they have been called tumours of puberty. The male sex is predominant, 75 per cent of the cases were male.

There are two elective sites of origin:

1. Basisphenoid or basiocciput.
2. In the tissues around the eustachian tubal orifice.

The tumours are usually sessile, volume varying from the size of a hazelnut to a walnut. In Muller's case, the tumour which was removed weighed approx. 4½ oz.

Histology

They are either pure chondromas or myxochondromas. The consistency varies and may be harder due to an outside covering of muscle and epithelium. There is no sharply dividing line between the simple chondroma and chondrosarcoma. All grades may be found and, especially in children, the histology may be very complex and approach that seen in teratomas of the pharynx.

By direct spread, the tumour may occupy different anatomical planes in the pharyngeal wall.

There are two mechanisms of origin:

1. The chondroma may arise from the cartilage elements of the eustachian tubal orifice.
2. Arise from cartilage elements which form the basisphenoid and occiput.

The symptomatology can be divided into three groups—nasal, aural and pharyngeal.

Nasal obstruction is progressive, first unilateral, later bilateral—the patient finding it impossible to blow his nose and secretion collecting. Anosmia may occur. Later aural symptoms are noticed—deafness and tinnitus. Speech is altered due to lack of nasal resonance, known as rhinolalie fermée.

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Clinically, these benign tumours of the nasopharynx are covered by normal mucosa and on anterior and posterior rhinoscopy, one sees a pale pink lobulated mass, only slightly vascular. On palpation, the firm consistency and the insertion of the tumour can be found. The absence of hæmorrhage and of glands in the neck are important factors in the diagnosis. But even in the absence of hæmorrhage, fibroangioma must be excluded and the only way is by a biopsy and examination of the specimen under a microscope.

Treatment is surgical—complete extirpation being the ideal. If small, these tumours can be removed by the natural passages with a pair of scissors and forceps, but if larger the best approach is transpalatal.

To illustrate these various points, here are two case reports; the first of a young man who had a chondroma of his postnasal space and the second of a middle-aged woman with a chondrosarcoma in the same situation.

The man, in his early twenties, gave a 5 year history of gradually increasing nasal obstruction, complete on the left, slight on the right, mucoid nasal discharge, but no bleeding. The left ear felt full and he had noticed some deafness. His relatives had noticed that his voice had changed during the previous year.

Examination showed complete left nasal obstruction and partial obstruction on the right. Mouth and palate appeared normal. In the postnasal space a smooth diffuse swelling was seen to occupy the roof and occluding the left choana and extending over to the right choana. The left eustachian cushion was obliterated, the right normal. There was no other abnormality to be seen in the rest of the upper respiratory tract. There were no palpable glands in the neck. The left tympanic membrane was pale and full and he had a conductive deafness.

Investigations were made:

The tomograph view (Fig. 1) shows nasopharynx occupied by a tumour mass with areas of calcification in it.

Blood counts were normal.

On examination under anæsthesia, one found a hard lobulated mass occupying the left side of the postnasal space and arising from the roof. The surface was not ulcerated and no bleeding occurred. A biopsy was taken (Fig. 2). This is a simple chondroma: cells uniform in type and not highly cellular.

The tumour was later removed in toto transpalatally.

The incision as described by Mr. C. P. Wilson was used. The soft palate was retracted by inserting the tongue piece of the Boyle Davis gag into the gap between the hard and soft palates. This gave a very good view of the tumour which was removed by curetting the mass away, after incising and reflecting the mucous membrane overlying the tumour. The cavity was filled with a B.I.P.P. pack and the end of the pack was drawn through the nose.

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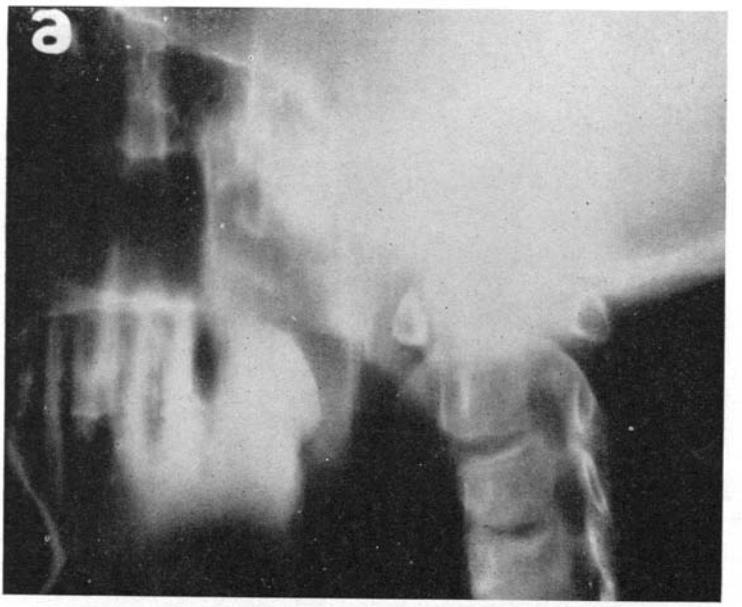


FIG. 1.

Case I. Tomograph of the nasopharynx showing the tumour.

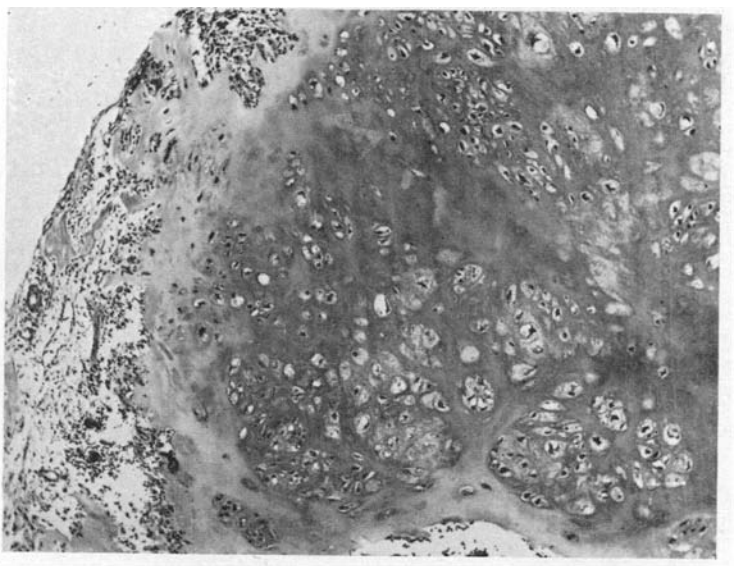


FIG. 2.

Case I. Biopsy of the tumour. Simple chondroma.

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The soft and hard palates were sutured with chromic cat-gut.

Plain X-ray (Fig. 3), shows the extent of the cavity curetted out and filled with B.I.P.P. pack.

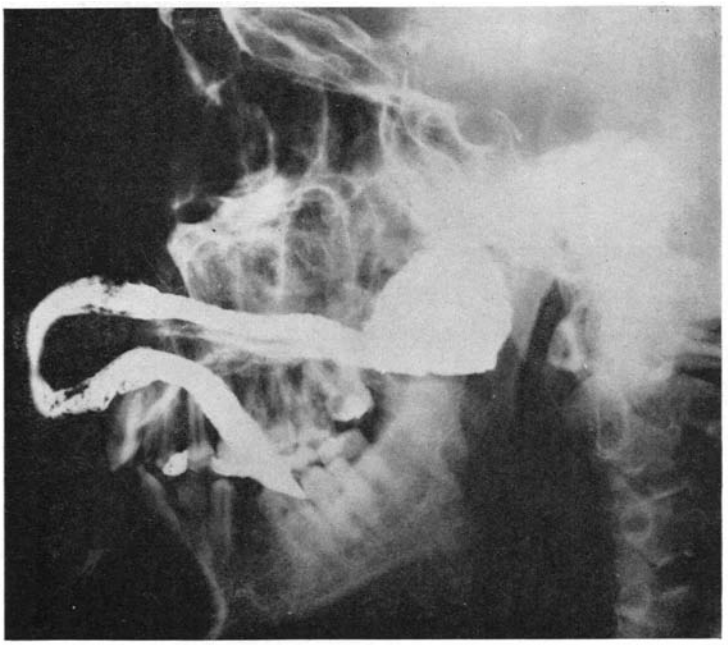


FIG. 3.

Case I. X-ray showing the cavity packed with B.I.P.P.

A left paracentesis was done and pale fluid released, with immediate relief of his aural symptoms.

This operation was done over a year ago and he has remained well since. The postnasal space, apart from some scarring, is normal in appearance. His hearing is also normal. His speech has improved following a course of speech therapy.

The lady with the chondrosarcoma was aged 45 when first seen two years ago. Her history was that of 9 months increasing right nasal obstruction, associated with mucopurulent discharge—never blood-stained. For 4 months she had noticed progressive loss of hearing on the right. She had no headaches, diplopia, facial pain or paraesthesia.

Examination revealed a large irregular tumour occupying the right side of the postnasal space. No glands were papable in the neck. The tumour was removed *viâ* the transpalatal route and section showed it to be a chondrosarcoma (Fig. 4). This shows tumour tissue invading bone.

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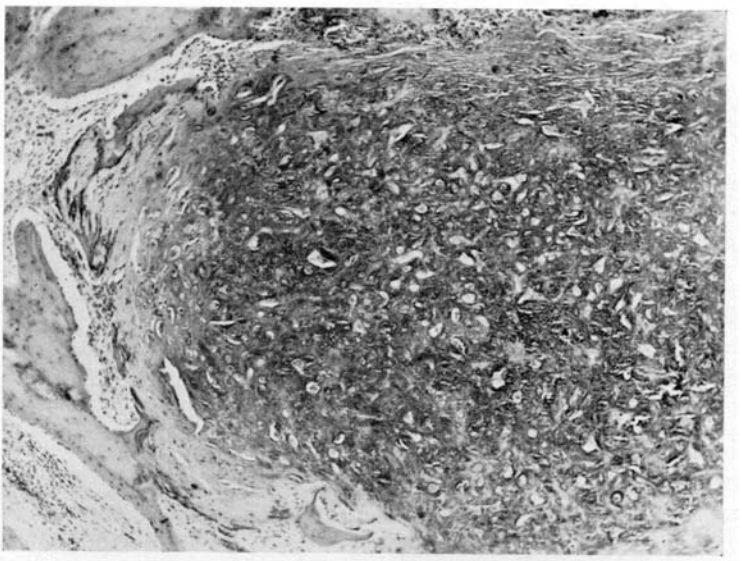


FIG. 4.
Case II. Section of the tumour. Chondrosarcoma.

The tumour is not so highly differentiated, more cellular, but it is relatively slowly growing, as new bone can be seen forming on the periphery.

In view of:

1. Low sensitivity of this tumour to radiotherapy.
2. Often long natural history.
3. Potential hazards of irradiating this area to the necessary high dosage.

It was decided to adopt a policy of observation.

However, 18 months later, right sided headaches began and X-ray of the skull showed destruction of sphenoid and possible extension into the pituitary fossa. Hence D.X.R. 6,000 r was given over a period of 6 weeks.

Her headaches have now cleared, although further X-rays show no change in the base of the skull. She is still under regular observation.

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REFERENCES

RAO, A. B. N. (1956) *J. Laryng.*, **70,** 371.
TERRACOL, J., FABRE, L., and GUERRIER, Y. (1948) *Ann. Oto-laryng. (Paris)*, **65,** 42.
WIRTH, J. E., and SHIMKIN, M. B. (1943) *Arch Path. (Chicago)*, **36,** 83.
YATES, A. LOWNDES (1935) *Proc. roy. Soc. Med.*, **29,** 190.

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