Intranasal schwannoma

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SCHWANNOMAS or tumours of nerve sheath have been described under a bewildering variety of names, such as neuroma, neurinoma, neurilemmoma, perineural fibroblastoma, neurofibroma and peripheral glioma. This diversity of nomenclature is due to its disputed origin as to whether it arises from Schwann cell (neurilemmal cell) which is neuroectodermal or from mesenchymal fibroblast of the endoneurium or perineurium. Differential staining of histological sections has revealed both these components. Schwann cell has also been demonstrated to produce collagen in tissue cultures (Murray and Stout, 1940).

Schwannomas most often occur in head and neck region. They have been described in internal acoustic meatus, pharynx, parapharyngeal space, tongue, soft palate, larynx, external auditary meatus and trachea. Their occurrence in the nasal cavity is uncommon and presents special problems of diagnosis and treatment.

We here report a case of solitary benign schwannoma of nasal cavity which was treated by surgery alone and patient is perfectly well after $4\frac{1}{2}$ years' follow-up.

Case report

J.S., 25 years male, teacher by profession, reported on 4 April 1964 in E.N.T. outpatient department with chief complaint of recurrent epistaxis from the left side of nose for the past 5 years. Bleeding came in bouts and occasionally it was so profuse as to require intranasal packing. The left side of his nose remained almost blocked for the same duration. There was no history of bleeding from any other source. Because of recurrent epistaxis from the same side of nose, he was admitted for investigations.

Examination:

Pulse 80/mt., regular; B.P. 110/80 mm. of Hg.

Anterior rhinoscopy revealed marked deflection of the septum towards left jutting against middle turbinate and a spur in its lower part. Re-examination of nasal cavity after decongestion did not contribute anything additional. Posterior rhinoscopy and digital examination of post-nasal space was non-contributory.

Blood examination showed Hb. 13·0 g. per cent, Prothrombin index 85 per cent. Total and differential leucocytic count, platelet count, bleeding and coagulation time were within normal limits. Urine was normal with no evidence of microscopic haematuria.

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X-ray of anterior group of paranasal sinuses revealed mucosal hypertrophy of left maxillary antrum.

Finding no obvious cause for epistaxis and taking into consideration the marked deflection of the septum and a large spur, submucosal resection of the septum was planned. Patient was operated on 23 April 1964. When the septal flap was displaced to the right, a big reddish firm polypoidal mass was seen filling the posterior half of the left nasal cavity. It bled on touch. The mass was completely removed by morcellement. It appeared to arise from ethmoidal region: exact site was difficult to define. Post-operative period was uneventful and patient was discharged on 2 May 1964.

Histopathological examination of the tumour showed typical picture of benign schwannoma with high degree of vascularity. Areas of fresh and old haemorrhages and myxomatous degeneration were also visible. (Figs. 1 and 2).

Bearing in mind that schwannoma may herald von Recklinghausen's disease, a thorough search was made for any other manifestation of the disease but nothing could be discovered.

Patient had been under our constant observation. Clinical examination, puretone audiometry and X-ray paranasal sinuses repeated on 27 July 1966, were normal. Our last correspondence with the patient was in September 1968; he was perfectly normal.

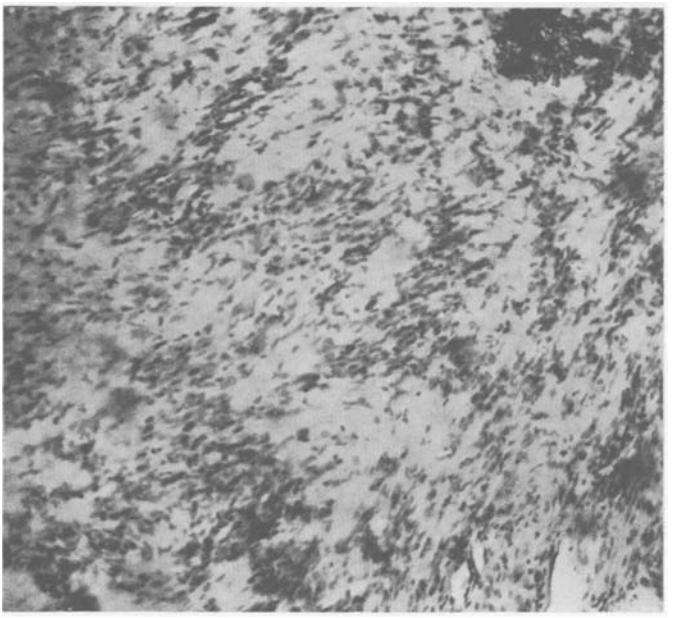


FIG. 1.

Haemotomylin and Eosin staining (low power), Criss Cross bundles with intervening areas of myxomatous degeneration.

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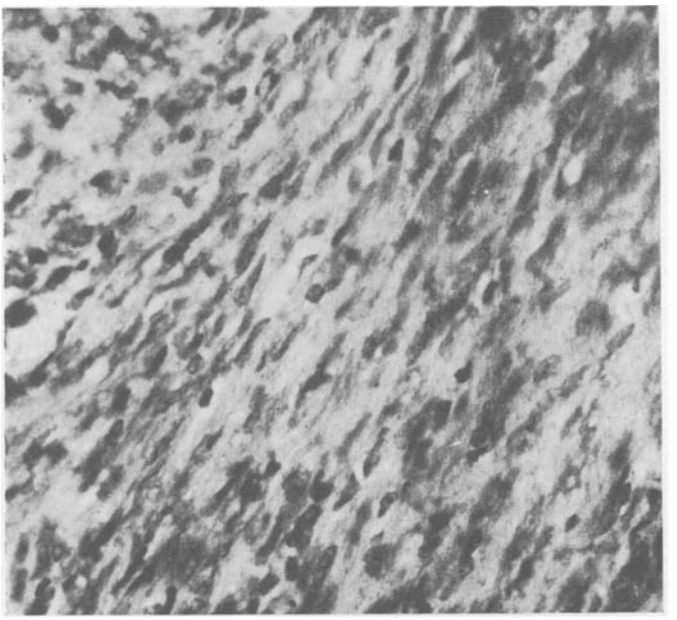


FIG. 2.

H.E. staining (high power), One of the bundles cut longitudinally showing high cellularity and large-sized hyper-chromatic nuclei.

Summary

Subject of schwannomas of the nasal cavity with regard to their frequency, site of origin, symptomatology and treatment has been reviewed. Schwannoma of nasal cavity is a rare entity and only 32 cases were found on record in the available world literature up to 1967. We have presented another case of benign intranasal schwannoma probably of ethmoidal origin who presented with repeated epistaxis. Complete removal of the tumour was done by morcellement. Case has been followed up to $4\frac{1}{2}$ years and is perfectly normal.

REFERENCES

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