PARAGANGLIOMA IN THE NASOPHARYNX

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A 50-years old male presented with swollen right eyelids, bleeding per nostrils and a vague left post-auricular swelling for 4 months. Posterior rhinoscopy revealed one pinkish polypoidal mass in the posterior nare and roof of nasopharynx. FNAC from the post-auricular swelling suggested metastatic undifferentiated carcinoma. Incisional biopsy was done from the nasopharynx and histopathological examination proved it to be a malignant paraganglioma. The case is reported for its rarity.

INTRODUCTION

Paragangliomas are a fascinating but uncommon groups of neoplasms of chemoreceptor tissue that may originate anywhere glomus bodies are present. Carotid body and related paraganglia monitor the PH and partial pressure of oxygen and carbon dioxide of the systemic arterial blood supplying it. Enlargement of carotid body occurs in response to chronic hypoxia of high altitude. Cardio-pulmonary disease, chronic anaemias, chronic myeloid leukaemia, acute myeloblastic leukaemia, aplastic anaemia and hypochromic anaemia complicating malignancy. But nasal/nasopharyngeal paraganglioma is a distinctly rare and commonly symptomatic tumour.

CASE REPORT

Mr. A., a 50-years tribal male from a distant hilly region presented with swollen right eyelids, bleeding per nostrils and a vague left post-auricular swelling for 4 months duration. His general physical examination revealed average built, no anaemia, cyanosis, clubbing and rise in JVP. His B. P. was 130/80 mm of Hg. Systemic examination revealed no abnormality. An irregular ill-defined nontender swelling behind the left ear lobule and extending to the post-auricular region was detected. It was fixed to the skin and underlying structures. Occular examination show boggy swelling and echymosed right eyelids but normal eye movements, fundus occuli and vision test-6/60 in both eyes. ENT examination revealed a polypoidal pinkish mass in the posterior nare and roof of the nasopharynx. Both external auditory canals were clear. Abnormal homogenous shadow projecting from the nasopharynx was also detected in the nasopharyngogram. There was no evidence of any bony erosion. All other results of laboratory works were within normal limit. FNAC from the left post-auricular swelling
disclosed several clusters of pleomorphic cells with abundant eosinophilic granular cytoplasm requiring a diagnosis of metastatic undifferentiated malignancy (Fig.1). However, as the cytologic picture was an unfamiliar one, it was decided to await an incisional biopsy report from the nasopharyngeal mass before determining further treatment.

epistaxis, rhinorrhea, nasal obstruction, swelling of the face and blurring of vision. Vagal body paraganglioma (VBP) may also protrude into the oropharynx with medical displacement of tonsil and often to the base of the skull. In the present case however, the swelling was high up in the nasopharynx including posterior nare and there was no associated evidence of vagus nerve involvement, as commonly seen in VBP. Lack et al (1977) reported that patients with paraganglioma, may subsequently develop or

**Histopathology**: Several sections prepared from the three samll brownish pieces of nasopharyngeal mass show predominantly irregular nest (zellballen) of epithelial cells having finely granular eosinophilic cytoplasm and small round to oval nuclei and distinct nucleoli (Fig. 2). Several pleomorphic cells and a few mitotic figures are also identified. The rich capillary network surrounding the irregular nests were accentuated by reticulin (Gomori) stain (Fig. 3.), but no argyrophilic granules detected in the cells. The histomorphological picture depicted is fairly typical of a paraganglioma.

**TREATMENT**

Before any therapeutic strategy could be chalked out, patient’s condition suddenly started deteriorating, probably due to intracranial extension and the patient left hospital against medical advice.

**DISCUSSION**

Nasal/nasopharyngeal paraganglioma is a distinctly rare condition affecting during first to fifth decade of life without any sex predilection. The usual mode of clinical presentation include may be associated with other neoplasms e.g. squamous cell carcinoma of larynx and lungs, mammary cancer, clear cell carcinoma of cervix, uteri and basal cell carcinoma. In spite of our best effort and all possible laboratory works, no evidence of any second neoplasm could be detected in our case. We believe that the left post-auricular swelling was a metastatic deposit from the nasopharyngeal paraganglioma as the cytomorphology of both the lesions were strikingly similar.

Despite the fact that carotid bifurcation is the commonest site of paraganglioma, a precise pre-operative clinical diagnosis is possible in less than 20 percent of CBP and understandably, clinical diagnosis of nasal/nasopharyngeal paraganglioma would be more difficult. Only selective carotid angiography and incisional biopsy with special histological stains provide the correct diagnosis. Electron microscopy also plays an important role in confirmatory diagnosis. Benign parangangioma occasionally shows pleomorphic cells and rarely mitotic figures. To the contrary,