

## Synovial Sarcoma of the Larynx

Anita Bhandari, Hony. Senior Resident, Man Prakash Sharma, Asst. Professor,  
A. S. Bapna, Professor & Head, Department of E.N.T.,  
SMS Medical College, Jaipur

*A 23 years old male presented with a soft cystic mass in the left paralaryngeal space since 3 months. Indirect laryngoscopy revealed a bulging of the left lateral pharyngeal wall. Histopathological examination of the biopsy proved it to be a synovial sarcoma. The case is the seventh case reported in literature.*

### INTRODUCTION

Soft somatic connective tissue constitutes a substantial part of the human body. Malignant tumours arising from such tissue, specially those in the head and neck region are uncommon and have been sparsely studied (Graeger, 1986). However a successful laryngologist must be aware of the small number of non-squamous neoplasia which affect the larynx and be able to accurately diagnose and treat them. Ketcham et al (1969) suggested that rapidly enlarging deeply situated masses which disturb the normal face and neck contour should be suspect of sarcoma. According to Constandinidis (1995), every case of synovial cell sarcoma should be published because it is of importance to get to know new aspects and therapeutical possibilities of this rare disease.

### CASE REPORT

A 23 years old male presented in the ENT OPD of SMS Hospital with a mass in the left side of the neck since 3 months. It was growing rapidly in size. There was also difficulty in swallowing. Examination revealed a soft cystic non-tender mobile mass in the left paralaryngeal region. Indirect laryngoscopy revealed bulging of the lateral pharyngeal wall. Laryngeal inlet and vocal cords were normal. X-ray chest was normal. CT

scan of the neck revealed a heterogenously enhancing soft tissue mass posterior to the left pyriform fossa measuring 3 cm x 3.5 cm in supero inferior extent. This lesion was contiguous with the left pyriform sinus, AE fold, left arytenoid

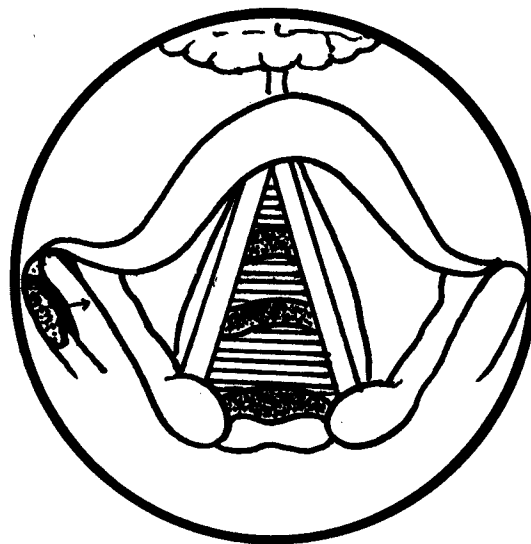


Fig.1

*Tumour pressing upon the wall of pyriform fossa inwards*

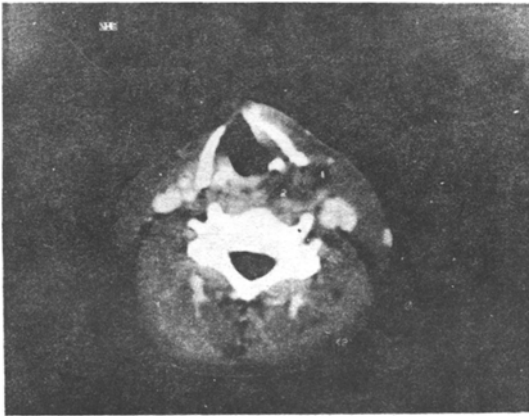
cartilage and cricopharyngeal joint. The histopathological report revealed a biphasic high grade soft tissue sarcoma showing the classic appearance of synovial sarcoma.

### OPERATION

A total laryngectomy was planned. After doing a transverse pharyngotomy at the level of the hyoid, it was seen that the CT scan findings were deceptive. Actually the tumour was arising from

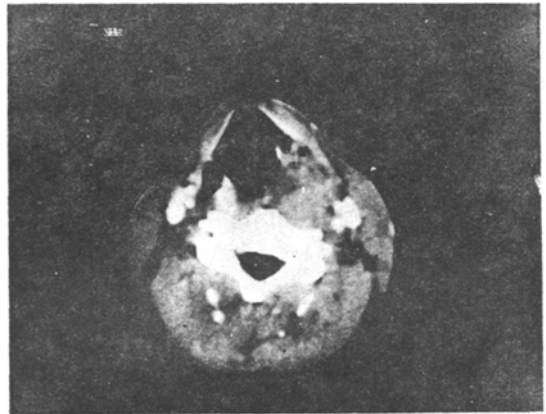
the cricothyroid joint and extending inwards pushing the lumen of the pyriform fossa medially without involving its mucosa. The involved part of the cricoid and thyroid cartilage were removed taking an adequate safety margin along with the pyriform fossa of the left side. Pharyngeal repair was completed and the wound was closed in layers. After 6 weeks radiotherapy (6000 Rads) and chemotherapy with Ifosmide 1 gm/m<sup>2</sup>/day for 5 days and Cisplatin 30 mg/day for 5 days was given.

A painless neck mass is the most common presenting symptom. In evaluation duration, shape, size, consistency and relationship of the mass to the surrounding sites are of prime importance. Lymph node metastasis is rare. Hematogenous spread is more common with lung being the most probable site of metastasis. CT scan gives the most accurate delineation of the tumour. Favourable prognosis depends on early diagnosis and surgical excision. Simple enucleation does not adequately treat occult



**Fig.2**

*CT Scan showing Laryngeal growth*



**Fig.3**

*CT Scan showing Laryngeal growth*

## DISCUSSION

Synovial cell sarcoma is a rare mesenchymal tumour occurring very infrequently in the head and neck. This tumour is more frequently found in association with the limb joints.

The diagnosis of synovial cell sarcoma is difficult because approximately 1/3 of patients initially received incorrect pathologic diagnosis (Amble, 1992). It is more common in young (12-43 yrs.).

metastasis into adjacent tissues, satellite foci and muscle bundle spread. Routine elective radical neck dissection is not recommended. For high grade synovial sarcoma, combined modality of surgery, radiotherapy and chemotherapy is best (Milor, 1994). For low grade or T<sub>1</sub> primary tumours, aggressive initial radical excision continues to be the most effective therapeutic modality for both local control and long disease free survival.

## References

1. Amble, F.R.; Oisen, K.D.; Nasciment, A.G. et al (1992): Head & Neck Synovial Cell Sarcoma. *Otolaryngology-Head & Neck Surgery*, 1992; Nov. 107(5): 631-7.
2. Constandinidis J.; Weber, R.; Draf W et al (1995, Feb): Synovial Cell Sarcomas of the head and neck area. *Laryngorhinologic*, 74(2): 98-102.
3. Greager, John.; Tapas Das Gupta (1986): Adult head and neck soft tissue sarcomas. *Otorhinolaryngologic Clinics of North America* (1986): pg. 565-571.

4. Ketcham .A.S.; Chretien, P.B.; Pitch, Y.H : (1969) : Sarcomas of head and neck. In Gaisford, J.E. (ed.) "Symposium on cancer of the head and neck-II St. Louis, C.V. Mosby.
5. Louis, D.S.; Hankim, F.M.; Hankim, R.C. : Synovial cell sarcoma : A case report with comment on 27 yrs of treatment.
6. Milor M., Quinn, P.D.; Steward, J.C. (1944 March) : Monophasic spindle cell sarcoma of the head & Neck report of 2 cases and review of literature. *Journal of Oral and Maxillofacial Surgery* : 52(3) : 309-13.

## OBITUARY

We deeply mourn the sad demise of Prof. P. P. Karnik who passed away on the 19th of July, 1998. Prof P. P. Karnik was one of the stalwarts in the ENT fraternity and was instrumental in bringing about radical improvements in the discipline. Prof. P. P. Karnik had retired as the head of the ENT dept. of KEM Hospital in 1984 but had kept himself involved in active clinical practice till the last day of his life. Prof P. P. Karnik was very widely respected and was immensely popular through out the country. He was one of the very few persons who had the privilege of being elected President of AOI (1982) uncontested. Prior to this, Prof. Karnik had served our Association in various capacities. In addition to being a renowned academician and one of the finest ENT surgeons we have ever had, Prof. Karnik's greatest contribution to our discipline has been in the making of some of the best otolaryngologists in the country. He was reputed to be a very good teacher and it was due to him that many best students of KEM took up ENT as their field of specialisation year after year. Most of the ENT celebrities of today are all his disciples. It is with a heavy heart that we salute this great teacher of the teachers—Prof. P. P. Karnik.



**Prof. P. P. Karnik**

Born : 1.8.1926    Died : 19.7.1998

Prof. P. P. Karnik leaves behind his wife and two sons—one of whom Probodh is now a renowned ENT Surgeon and is at present the Hony. Secy. of AOI.

May his soul rest in eternal peace.