Synovial sarcoma of the tongue Report of a case

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A case of synevial sarcoma of the base of tongue in a forty year old white man is presented. Synovial sarcoma usally involves extremities and very rarely it is seen in the neck region 1.2 3. To the best of our knowledge only one case of primary synovial sarcoma of the tongue has been reported.2

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Case report

The patient was a forty year old white male who was first seen on 2nd July 1972 in out-patient Department of Amir Alam Hospital with chief complaint of a vague sensation of having foreign body in his throat. This has developed during this past several weeks. He gave no history of trauma. He was not complaining of dyspnea, dysphagia or cough. Indirect laryngoscopy disclosed a round, 2 cm in diameter mass in valecula, just to the left of midline. He was advised to undergo surgery for excision of the mass, but he refused.

Two months later he was referred from another hospital with severe respiratory distress with possible diagnosis of inoperable Carcinoma of larynx.

An emergency tracheotomy was performed on admission to cope with the emergency situation. Next day laryngoscopy was performed which showed a large mass of approximately 6 cm. in diameter, filling the entire hypopharynx, pyriform sinuses and obstructing the larynx. The tonsils appeared normal and there was no cervical lymphadenopathy.

X-Ray of the neck showed a soft tissue shadow at the base of the tongue (Fig. 1). Chest X-Ray was essentially negative. Laboratory examinations were within normal limits.

On October 10th, 1972 the patient was taken to operating room and the tumor, which was attached to the valecula with a broad base was removed through a pharyngotomy. The surgical specimen measured 6x5x5 cm. It was partly covered by smooth mucosa having multiple smallow ulcers. The cut surface was uniformly grey with some area of hemorrhage in the tumor. Histological examination showed the typical appearance of synovial sarcoma (Fig. 2), with two distinct component. One composed of long spindle shaped cell with large vesicular nuclei arranged in bundles and whorls with few mitosis. The other adenocarcinomatous in appearance with glends lined

by tall cell. The lumen of the glands contained P.AS positive material.

Post operative course was uneventful and the patient was discharged on 10th post operative day in a good general condition. He was last seen on 10th February 1973 four months after operation and there was no evidence of recurrence or metastasis.



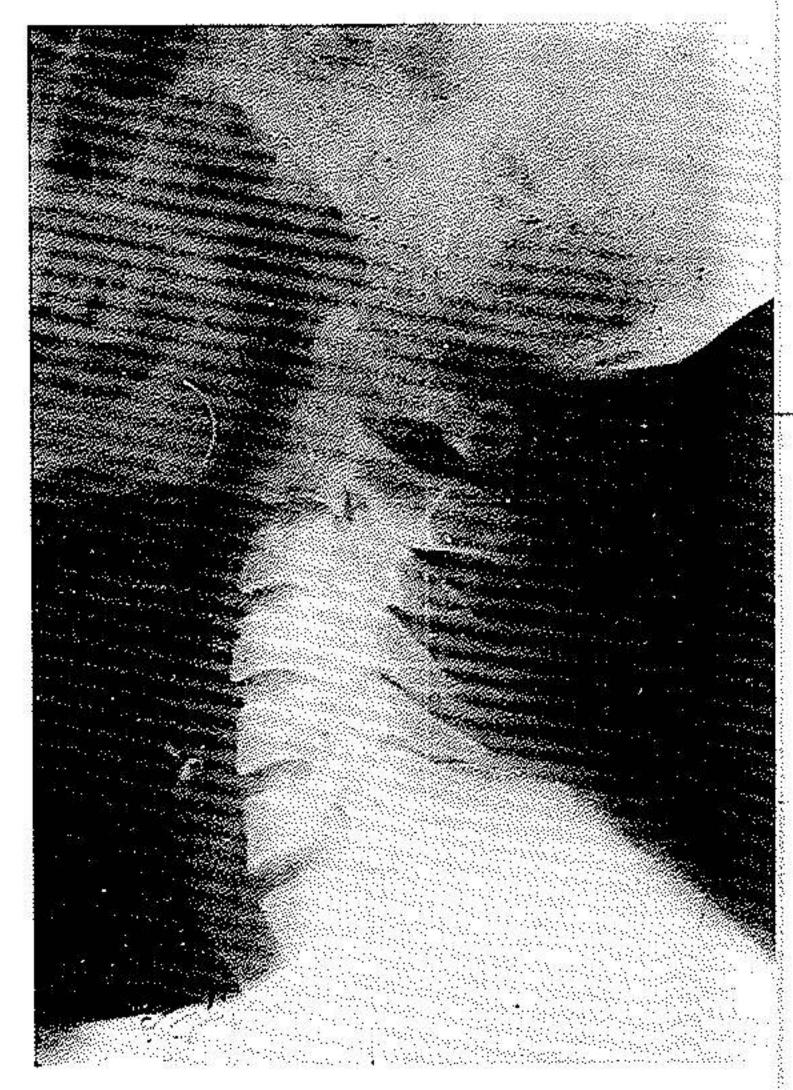


Fig 1 Fig 2

Discussion

Synovial sarcoma is a malignant tumor of soft somatic tissue, comrising approximately 8-19 % of all malignant tumors of this origin (4,5). It affects younger age group, the peak incidence being the third decade (4,5).

The extremities and limb girdles are the most common sites of involvement (4,6). Cases have been reported involving abdominal wall (7.8), chest wall (9), retroperitoneum (5).

Harrison et al in 1961 reported a case of synovial sarcoma in the thyrohyoid region and collected 4 more cases of synovial sarcoma in the head and neck region (1) Attie et al in 1970 reviewed the world lieterature and found 5 additional cases and added one of their own (3) including the case reported by Novotny et al occurring in the tongue. The present case is the 13th case occring in the head and neck region to be reported in the world literature and the second case in the tongue. Synovial sarcoma may arise from any tissue composed of synovia (joints, bursa and tendon sheaths) nevertheless does not often develop from the synovial membrane lining the joint surface and do not appear to be derived from the normal lining cells of bursa and tendon sheath, it may arise "donovo" from undifferentiated mesenchymal cells.

Synovial sarcoma in a tyical case is a roughly evoid mass often seemingly encapsulated, but it lack true capsule and the growth is by expansion and invasion (10). Histological appearance of this neoplasm has bimorphic pattern consisting of sarcomatous area intermingled with pseudoglandular component. The sarcomatous area is made of spindle cells cells arranged in whorls or bundles sometimes indistinguishable from fibrosarcoma. The Pseudoglands are lined by cuboidal or columnar cells and they secrete hyaluronic acid. Mitotic figures may be few or numerous. No correlation can be established between the histological appearance and prognosis (4). In a series of 134 cases studied by codman et al the mean duration of symtoms prior to the patient's seeking medical advice was 2.5 years (4), and its

biologic course has been protracted with recurrence rate of about 60-77% 4.5. 11

Metastasis occur chiefly through the blood stream and pulmonary metastasis were observed in 65-80 % of cases. (4,11). Metastasis to the regional lymphnodes were observed in approximately 20 % of cases (4,5). No cure was achieved by radiation therapy alone (4), and the best results were obtained when combination of the two were used (12).

5 year survival rate is estimated to be approximately 20 % and he more distal the neoplasm the better the outlook 5,11 and the prognosis appears to be better in children (10).

In 5 cases of synovial sarcoma in the neck studied by Harrison et al and the recent cases reported by Attie et al and Novotny et al no lymph node metastasis had been detected (1.3.2).

Reference

- Harrison E. GJr. Black B. M. Devine Synovial Sarcoma primary in the neck. Arch path71; 137-141, 1961.
- 2. Novotny G.M. fort T.s; Synovial Sarcoma of the tongue, Arch Otolaryngology 94: 77-80-July 1971.
- 3. Attie, J.N. Steckler, platt, N.: corvical Synovial Sarcoma Cancer 25: 758-761- April 1970.
- Cadman. N.L., Soule E.H and Kelly P.J Synovial Sarcoma: An analysis of 134 tumors, Cancer 18: 613-672 - 1965.
- 5. Ariel, I.M. and pack, G.t: Synovial Sarcoma review of 25 cases. New Eng JMed. 628 1272 1275- 1963.
- 6. Wright, C.J.E.: Malignant Synovioma. J. path. Bact 64: 583-603-1952.
- Murphy. E.S. and Margarit, E. Synovial Sarcoma of the anterior abdominal wali, Ann Surg 168: 928-930.
- 8. Hale, J.E and Calder, I.M: Synovial Sarcoma of theabdominal wall. Br J Cancer 24: 471-474- September 1970.
- 9. Eisenberg, R.B. and Horn, R.C: Synovial Sarcoma of the chest wall: Report of case. Ann Surg. 131: 281-285, 1950.

- 10. Crocker. D.W and Stout, A.P: Synovial Sarcoma in children, Cancer 12: 1123-1133.
- 11. Pack, G.T. and Ariel, I.M.: Synovial Sarcoma (Malignant Synovioma). Areport of 60 cases Surgery 28: 1047-1950.
- 12. Raben, M., Calabress, A. Higinbothan N.L., and phillips, R.: Malignant Synovioma, Amer. J Rontgen 93: 145-153, 1965.
