

## Synovial Sarcoma - A Case Report

**M. Alamgir Chowdhury<sup>1\*</sup>, SM Khorshed Alam Mazumder<sup>2</sup>, AKM Ekramul Haque<sup>3</sup>,  
Afroza Suraya Majumder<sup>1</sup>, Shamim Rima<sup>1</sup>,  
Maskat Uddin<sup>1</sup>, A B M Tofazzal Hossain<sup>4</sup>**

<sup>1</sup>Anwer Khan Modern Medical College, Dhanmondi, Road 8, Dhaka, Bangladesh

<sup>2</sup>Holy Family Red Crescent Medical College, Dhaka, Bangladesh

<sup>3</sup>National Institute of Chest Diseases and Hospital, Mohakhali, Dhaka, Bangladesh

<sup>4</sup>Department of Surgical based disciplines, Faculty of Medicine and Health Sciences,  
Universiti Malaysia Sabah, Jalan UMS, 88400, Kota Kinabalu, Sabah, Malaysia.

\*Corresponding Author's email: alamgir.chowdhury07@gmail.com

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### ABSTRACT

Synovial Sarcoma is a rare malignancy. It presents in adolescents and young adults. It occurs in soft tissue of extremities usually near to the large joints, heart, lung, mediastinum, head and neck. A 23-year-old female presented with a big hard fixed swelling in right supraclavicular region for 15 years. X-Ray chest posterior-anterior view presented Homogenous opacity in upper lobe of right lung. USG of neck showed large heterogeneous lobulated almost avascular solid mass in right side of root of neck and anterior upper mediastinum may be associated with Schwannoma/ paraganglioma/soft tissue sarcoma. Spindle cell lesion was reported by FNAC. MRI showed large slightly lobulated mass along right side of root of neck and right side of superior mediastinum. A large soft tissue density mass along right side of neck and superior mediastinum was found in CT scan. Surgical excision was done successfully. Histopathological examination revealed spindle cell tumor favoring synovial sarcoma in the neck tissue and metastatic spindle cell tumor in the lung lesion.

**Keywords: synovial sarcoma, soft tissue sarcoma, spindle cell lesion, schwannoma, paraganglioma.**

### INTRODUCTION

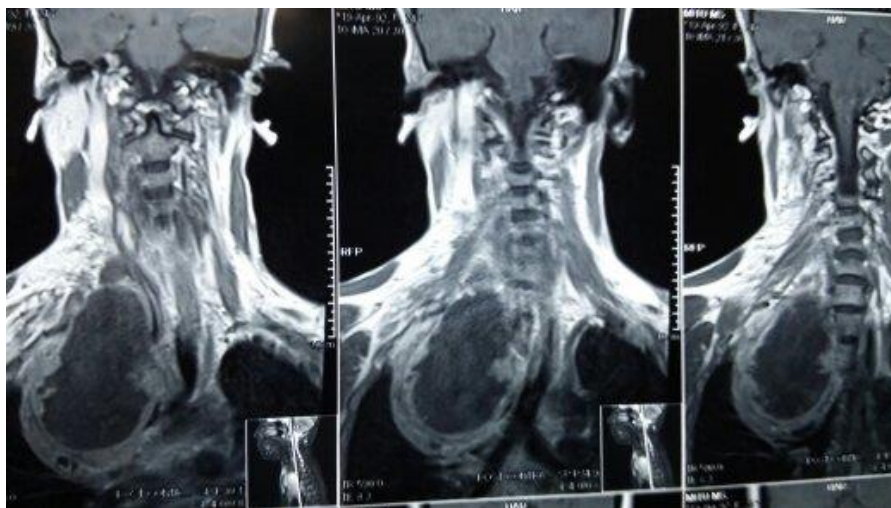
Synovial Sarcoma/ Malignant Synovioma is a rare form of cancer which is presents in adolescents and young adults, mainly occurs in soft tissue of extremities usually near to the large joints, heart, lung, mediastinum, head and neck. It may cause no noticeable sign symptoms. However, as the tumor grows

larger, affected people may notice a lump or swelling synovial sarcoma does not have a clearly defined cause, genetic factors are believed to influence the development of the disease<sup>1,2</sup>. Radiologic evaluation is very important before treatment. Imaging techniques employed in pre-operative evaluation include radiography, magnetic resonance imaging (MRI) and computed tomography (CT)<sup>3</sup>. Diagnosis is made by histopathology and immunohistochemistry. The main story of treatment remains complete surgical excision<sup>4</sup>. Prognosis is poor with an overall 5 years survival rate of 50%<sup>5,6</sup>.

### CASE PRESENTATION

A 23-year-old female patient reported in the ENT – HNS Department of Anwer Khan Modern Medical College, Dhaka, with swelling in right supraclavicular region for 15 years which is gradually increasing in size, lobular in shape, 10 cm x 7 cm in size, hard in consistency, fixed, tender on palpation, and extend up to right superior mediastinum associated with mild respiratory distress and voice change for few days. There is no history of fever, hemoptysis, asthma, COPD.

All routine hematological investigations reveal normal. X-Ray chest presented homogenous opacity in upper lobe of right lung. USG of neck showed large heterogeneous lobulated almost avascular solid mass in right side of root of neck and anterior upper mediastinum may be associated with Schwannoma/paraganglioma/soft tissue sarcoma. FNAC commented it as spindle cell lesion. There was a large soft tissue density mass along right side of neck and superior mediastinum in CT scan report. MRI reported large slightly lobulated mass along right side of root of neck and right side of superior mediastinum (Figure 1).



**Figure 1:** MRI showed large slightly lobulated mass along right side of root of neck and right side of superior mediastinum.

The neck and mediastinal mass was removed by collar incision in supraclavicular area. Right upper lung lobe lesion was removed by endoscopic right thoracotomy approach. Histopathological examination of right neck tissue revealed spindle cell tumor favours synovial sarcoma. Tissue from right lung presented metastatic spindle cell tumor favoring synovial sarcoma.

She was referred to radiotherapy department for further management. She was fine till the last follow-up.

## **DISCUSSION**

Synovial sarcoma is a rare, aggressive, slowly growing soft tissue tumor arises from synovial membrane mesenchymal or epithelial structure which is accounts 7-10% in all malignant sarcoma<sup>2</sup>. It occurs mainly in adolescent and in young adult, mean age is 15 – 40 years, usually affected large joints, head, neck, heart, lung and mediastinum<sup>7</sup>. We have encountered such a case in a female of 23-year-old with history of neck swelling for 15 years, which is resemble to description of mass. Secondary metastasis occur in lung, plasma, bone, brain but in our case metastasis occur in the upper lobe of the right lung.

Surgery is indicated for synovial sarcoma. In our case surgical excision was done by supraclavicular incision and lung lesion by thoracotomy approach. Radiotherapy reduce the risk of local recurrence and chemotherapy may increase survival rate and also decrease the number of remaining microscopic cells. Although prognosis is very poor. Survival rate is 7 – 50% with appropriate treatment<sup>7</sup>. We refer the patient to radiotherapy department. She was alright till the last follow up.

## **CONFLICT OF INTEREST**

The authors declare that they have no competing interests.

## **CONSENTS**

Written informed consent was obtained from the patient to publish the case with its related pictures. Written consent from hospital management was also obtained. Copies of the written consents are available for review by the Chief Editor of this journal.

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