

infections<sup>3</sup>.

Radiographic investigations reveal pleural effusion (exudative/hemorrhagic), pleural nodular shadows (diffuse or localized) or involvement of lungs, ribs, spine. Irregular pleural thickening involving parietal and visceral pleura with very minimal involvement of lung parenchyma and gradually encasing the lung by a thick rind of tumor is characteristic at radiology. It extends locally by contiguity into ribs and thoracotomy scars and metastasizes in a centrifugal manner to surrounding local structures unlike primary lung carcinoma. Diagnosis of MPM mandates a good history correlated well with physical examination, radiological findings, pleural fluid cytology, histopathological examination of pleural nodule and its immunohistochemistry. Some studies suggest that PET-CT is superior to FDG-PET, MRI and CT in terms of specificity and sensitivity of disease detection and staging of MPM<sup>4</sup>. Video assisted thoracoscopic biopsy has been considered most accurate in terms of diagnostic yield when compared with thoracentesis, fluid cytology or closed pleural biopsy.

## CONCLUSION

Malignant pleural mesothelioma can present in patients with no

previous history of asbestos exposure. Radiological features that are inconsistent with primary lung cancer but showing pleural pathology should raise the index of suspicion of MPM. Correlating these findings with immunohistochemistry is mandatory and hence a diagnosis of MPM requires systematic approach.

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## REFERENCES

1. Arunshet, GDS, *Malignant Pleural Mesothelioma. Textbook of Pulmonary and Critical Care Medicine* 2011;2:2068-2078.
2. Miller BH, Rosado-de-Christenson, Mason AC, Fleming MV, White CC, Krasna MJ. *Malignant pleural mesothelioma: Radiologic-pathologic correlation. Radiographics* 1996;16:613-44.
3. Fraser RC, Colman N, Pare PA. *Synopsis of diseases of chest. 3 ed. Elsevier India Pvt. Ltd; 2006.*
4. *Malignant Pleural mesothelioma. Suresh Rao. Department of Tuberculosis and Respiratory Diseases, Yenepoya Medical College, Mangalore-575 018, Karnataka, India DOI: 10.4103/0970-2113.48900.*
5. *Spectrum of high-resolution computed tomography imaging in occupational lung disease. IJRI* 2013; 23(4): 287-296.

## Scimitar Syndrome: A Case Report.

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**Abstract :** A rare congenital condition presenting with recurrent upper respiratory tract infections showed loss of lung volume in the right hemithorax with mediastinal shift; CT confirmed the presence of hypoplastic right inferior pulmonary segment with right inferior pulmonary vein draining into the inferior vena cava on CECT chest. This feature suggested the diagnosis of Scimitar Syndrome.

## INTRODUCTION

Scimitar Syndrome is a rare variable complex congenital condition consisting of aplasia/hypoplasia of bronchopulmonary segments with anomalous pulmonary venous drainage. Scimitar word refers to Turkish sword. We report a case diagnosed by CT.

## CASE REPORT

4 year old girl presented with recurrent URTI for chest X-ray. CXR revealed loss of lung volume on rt hemithorax with mediastinal shift to rt, non homogenous opacity at rt basal region with? Scimitar sign. The following dds were made, Atelectasis of rt lower lobe segments, Swyer-james syndrome, dextrocardia, scimitar syndrome.



**Fig. 1:** Chest x-ray; reveals loss of lung volume on rt hemithorax with mediastinal shift to rt with non homogenous opacity at rt base,?scimitar sign



**CECT ;** Right lung is small in volume (hypoplastic). Right inferior pulmonary vein is draining into the inferior vena cava at the level of diaphragm just above IVC-hepatic vein junction.

CT (single slice) thorax; revealed right lung is small in volume (hypoplastic). Right inferior pulmonary vein is draining into the inferior vena cava at the level of diaphragm just above IVC – hepatic vein junction. Shift of cardia and trachea to the right side. Otherwise lungs are clear. Echocardiogram did not show right pulmonary veins opening into the left atrium. The diagnosis of ss was made.

## DISCUSSION

SS was first described by Chissinat & Cooper in 1836<sup>5</sup>. Halasz used the term scimitar 1956<sup>1</sup> & Neil named ‘scimitar syndrome’ in 1960. Many terms are used to describe the Scimitar Syndrome as hypogenetic lung syndrome, pulmonary venolobar syndrome and epibronchial right pulmonary artery syndrome. Anomalous right pulmonary vein connection to the systemic venous circulation either below or above the diaphragm most commonly to the inferior vena cava, occasionally into the hepatic vein, portal vein, azygos vein, coronary sinus or the right atrium<sup>3</sup>.

Hypoplasia/ aplasia/ agenesis involving the right lung, absence of lobar

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