

AN ENIGMATIC CASE OF PLEURAL EFFUSION

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ABSTRACT

Solitary fibrous tumor of pleura is extremely rare condition, a total of only 2000 cases are reported in literature till date. About 2/3rd of these tumours arise from visceral pleura and 1/3rd arise from parietal pleura. Grossly, they appear as firm, encapsulated yellow tumours, which may be vascular with prominent veins over their external surface. Histologically, characterized by uniform, elongated spindle cells and varied amount of collagen and reticular fibres. Cell markers- vimentin, CD34, CD99 and bcl-2 but negative for cytoplasmic keratins. 50% of cases are asymptomatic and rests present with dyspnoea, cough and chest pain. 25% of the cases are febrile without any evidence of infection. 10-20% cases present with pleural effusion. 20% of the cases have hypertrophic pulmonary osteoarthropathy (*Pierre-Marie-Bamberg syndrome*) which resolves within 4-5 months after surgical removal of the tumor. Paraneoplastic syndrome associated with SFTP is hypoglycaemia (*Doegge-Potter syndrome*) which resolves within 3-4 days after surgical removal of the tumor. Treatment of choice is complete surgical removal.

CASE REPORT

A 45-year-old female presented to us in OPD with chief complains of shortness of breath for 7 days which was sudden in onset, gradually progressive MMRC grade 3. Patient also had left sided chest pain, high grade fever and dry cough from last 7 days. She denied any complains of haemoptysis, loss of weight, loss of appetite, orthopnoea or PND, headache, burning micturition and abdominal pain. She was known diabetic since last 10 years and was on oral hypoglycaemics regularly. She had no significant exposure history, no history of ATT intake or smoking. On general examination, patient had pallor. On respiratory system examination, left sided air entry was decreased. Other systemic examinations were within normal limits.

INVESTIGATIONS

Complete Blood Counts: HB- 6.2 mg/dl
TLC- 11120

DLC- N76L13

PLT- 4.31 lacs

LFT, RFT, RBS, HbA1C, Cardiac Profile, ECG and 2D-ECHO were within normal limits.



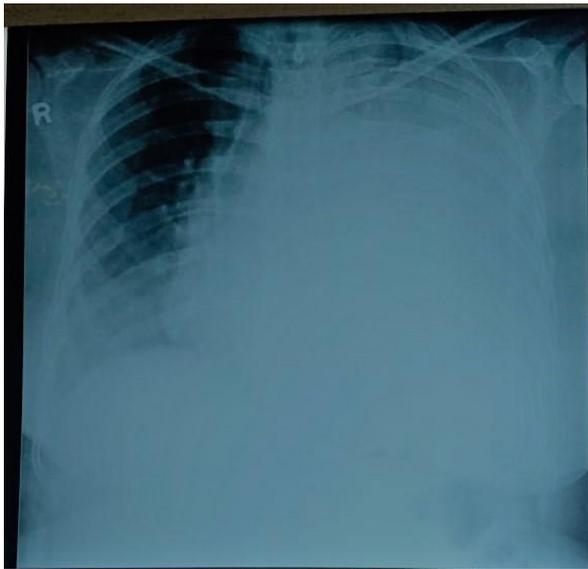
Chest X-Ray PA view showing left sided massive pleural effusion.

Pleural Fluid Examination

R/M	Reddish, turbidity +++, coagulum +, sediment +, sugar 160.8 mg/dl
TLC	3950
DLC	N63L34
Large cells	3%
Total protein	4.55 gm/dl
ADA	36
AFB & Gene Xpert	Negative
Malignant Cytology	Negative
C/S	Sterile
Pleural fluid Hct	3%
Well's score	6
D-Dimer	4647.75 ng/dl
BT & CT	Normal
PT-INR	13.7/1.3

Meanwhile, during stay in hospital a total of 4 units of blood transfusion was done but a rise of only 1.1 gm/dl was seen in Hb level.

A total of 4.5L of haemorrhagic pleural fluid was drained from left hemithorax in first 4 days of admission and a Chest X-ray PA view was repeated.



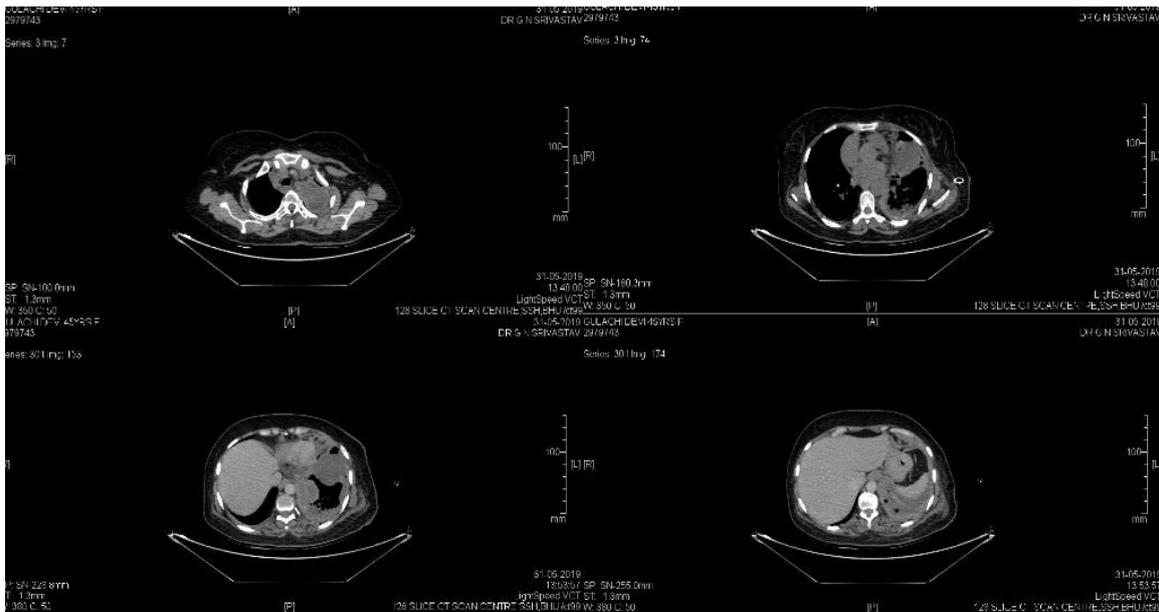
Chest X-Ray PA view after 4.5 L of thoracentesis

Tube thoracostomy was done after reporting of this X-Ray.



Chest-X ray PA view after tube thoracostomy

On day 1 of tube thoracostomy a total of 2L of pleural fluid was drained and CT-thorax was done.



CT-Thorax: Left upper lobe and lower lobe enhancing lesions s/o ?necrotising consolidation/neoplastic lesion, left sided pleural thickening, left sided volume loss.

Days after tube thoracostomy	Drain
Day 1	2000 ml
Day 2	1500 ml
Day 3	1700 ml
Day 4	2000 ml
Day 5	2500 ml
Day 6	1800 ml
Day 7	1700 ml
Day 8	1300 ml
Day 9	1000 ml
Day 10	600 ml
Total drain	16.2 L + 4.5 L = 20.7 L

Pleural biopsy- Solitary Fibrous Tumour of Pleura
(Followed by) **figure X**.

Patient was referred to department of cardiothoracic surgery for further management.

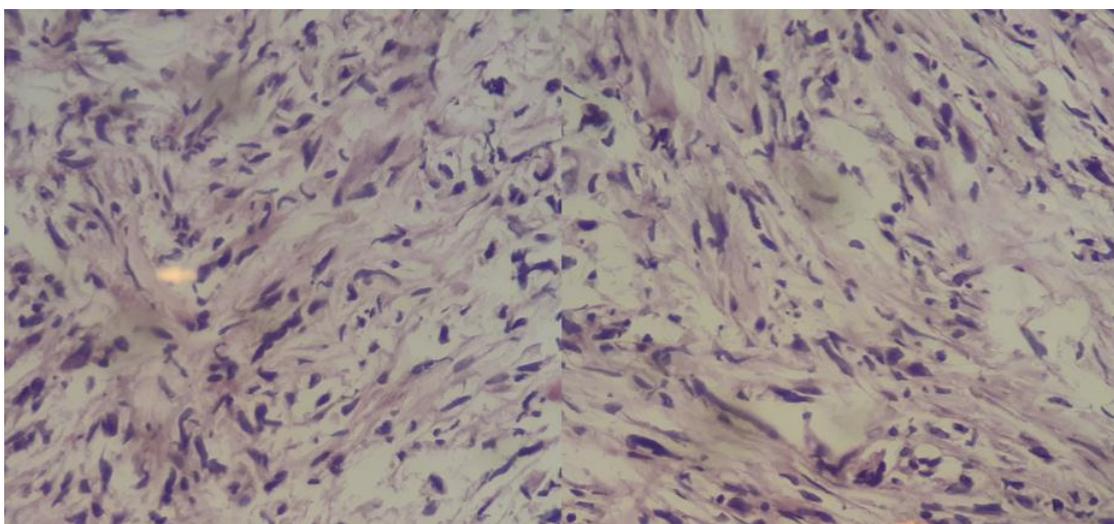


Figure X: Histopathological examination of Solitary Fibrous Tumour of Pleura.