

# A Mysterious Endobronchial Mass

Dr Shubhi Singhal  
Dept. of Respiratory Medicine  
Dr. D. Y. Patil Medical College Hospital &  
Research Centre, Pune

# CLINICAL COURSE

21 year old, Second Year B. Com student from Nanded

Recurrent episodes of Cough with expectoration,  
Fever, Dyspnea since April 2008

- Sought medical help mostly on OPD basis elsewhere for these complaints
- Had 3 admissions in 10 years for the same

# CLINICAL COURSE (Contd...)

Increased frequency and severity of these symptoms in the last 3-4 years

No H/o allergic diathesis, wheeze, hemoptysis, PND or chest pain

Was given Anti tubercular treatment twice in 2009, 2011 based on symptoms and chest Xray by private doctors

# JANUARY 2019

## Present admission:

- 1) Cough
- 2) Dyspnea
- 3) High Grade Fever
- 4) Streaky Hemoptysis

Worsened x 2 weeks



# History of Presenting Illness

- Cough: Associated with muco purulent expectoration
- Dyspnea: Grade II MMRC  
No chest pain, wheeze
- Fever: High grade, intermittent
- Hemoptysis: 2-3 episodes, streaky
- No history suggestive of foreign body aspiration

# EXAMINATION

- VITALS:
  - BP - 120/70 mm of Hg
  - PR - 96/min
  - RR - 20/min
  - SpO<sub>2</sub> - 94% on Room Air
- General Examination: NAD
- Respiratory System: Reduced intensity of breath sounds in right infra-axillary, infra-scapular and mammary areas.

# INVESTIGATIONS

- HEMATOLOGY:

Hb - 12.6 g/dL

TLC - 12,600/ cumm (P<sub>88</sub> L<sub>8</sub> E<sub>1</sub> M<sub>2</sub>)

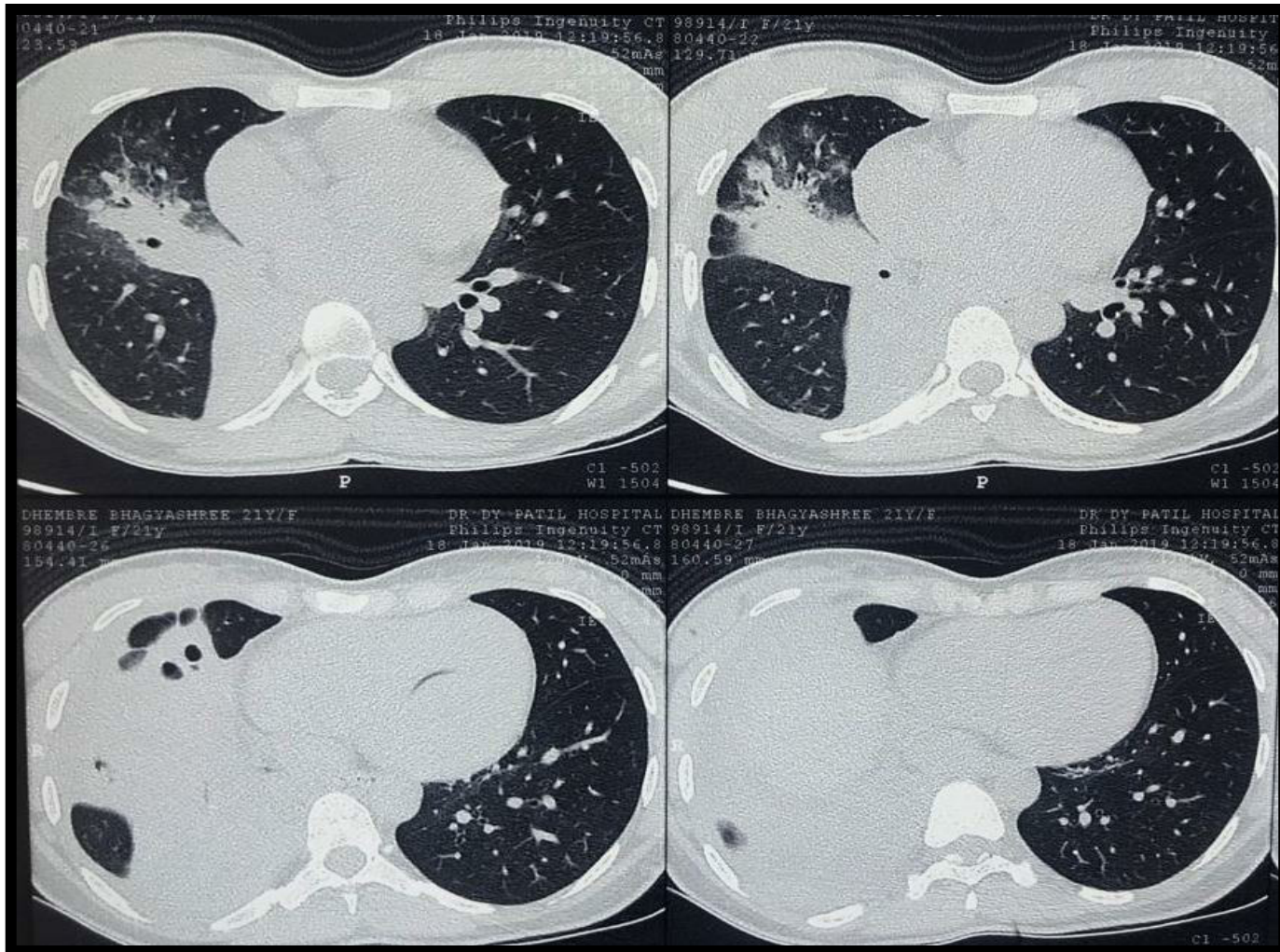
- BIOCHEMISTRY : WNL
- Sputum for AFB stain : Negative
- Sputum for CBNAAT : Negative
- Sputum Culture : No growth

## CXR – JAN 2019

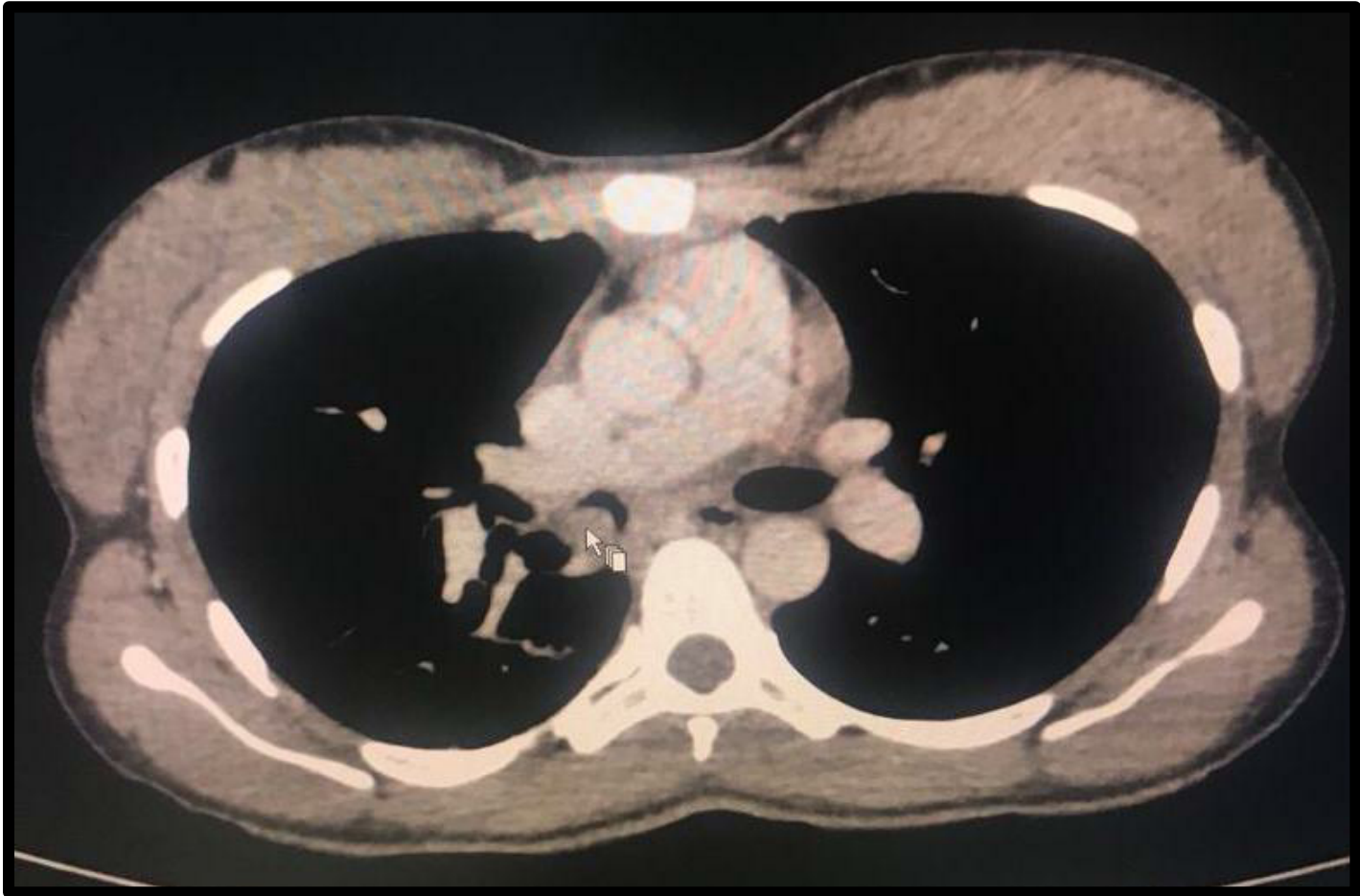


S/o Right Middle  
& Lower Lobe  
Collapse

# CT THORAX – JAN 2019



# CT THORAX – JAN 2019

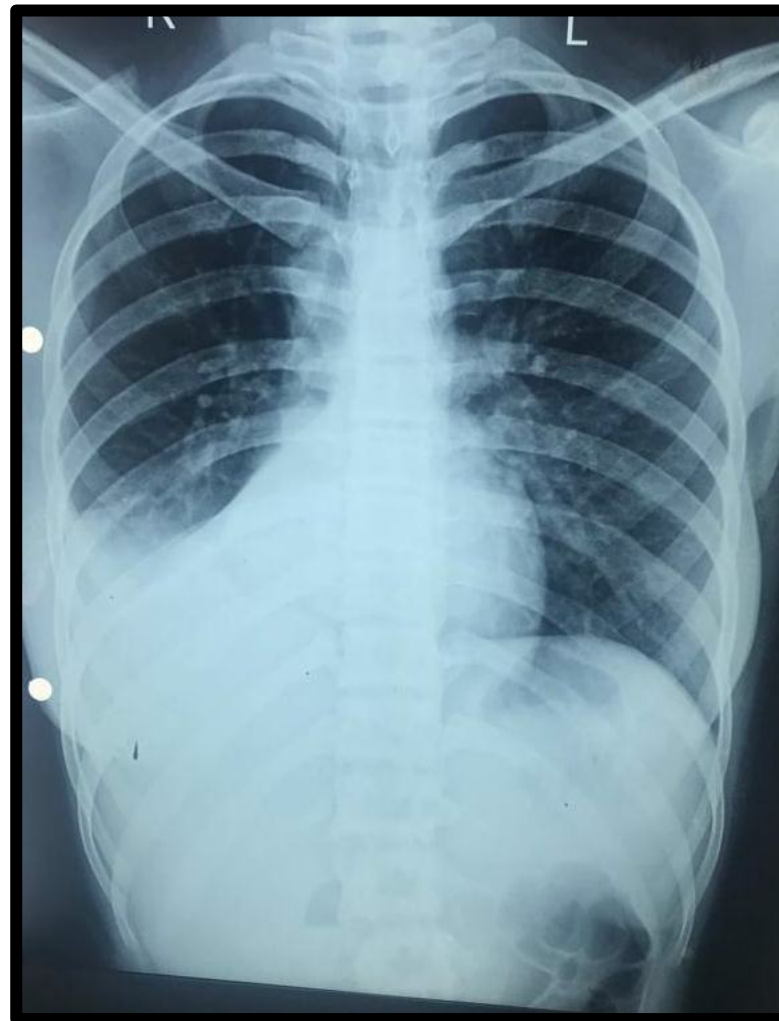




CXR – MAY 2011



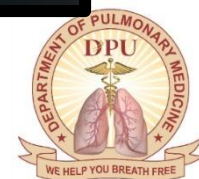
CXR – APRIL 2013



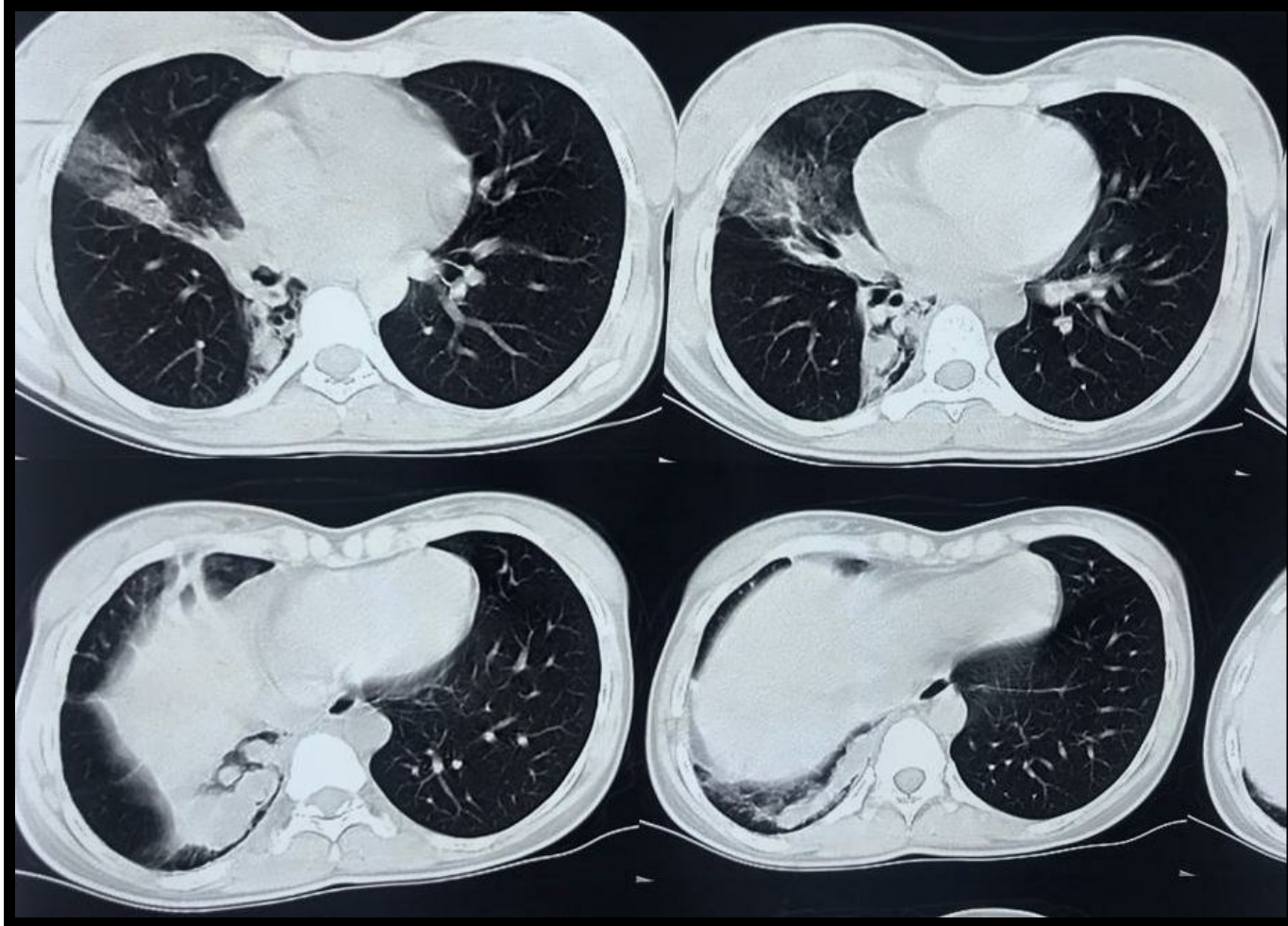
**DPU**

Dr. D.Y. PATIL VIDYAPEETH, PUNE  
(DEEMED UNIVERSITY)

DEPT. OF PULMONARY MEDICINE



# CT THORAX – MAY 2016





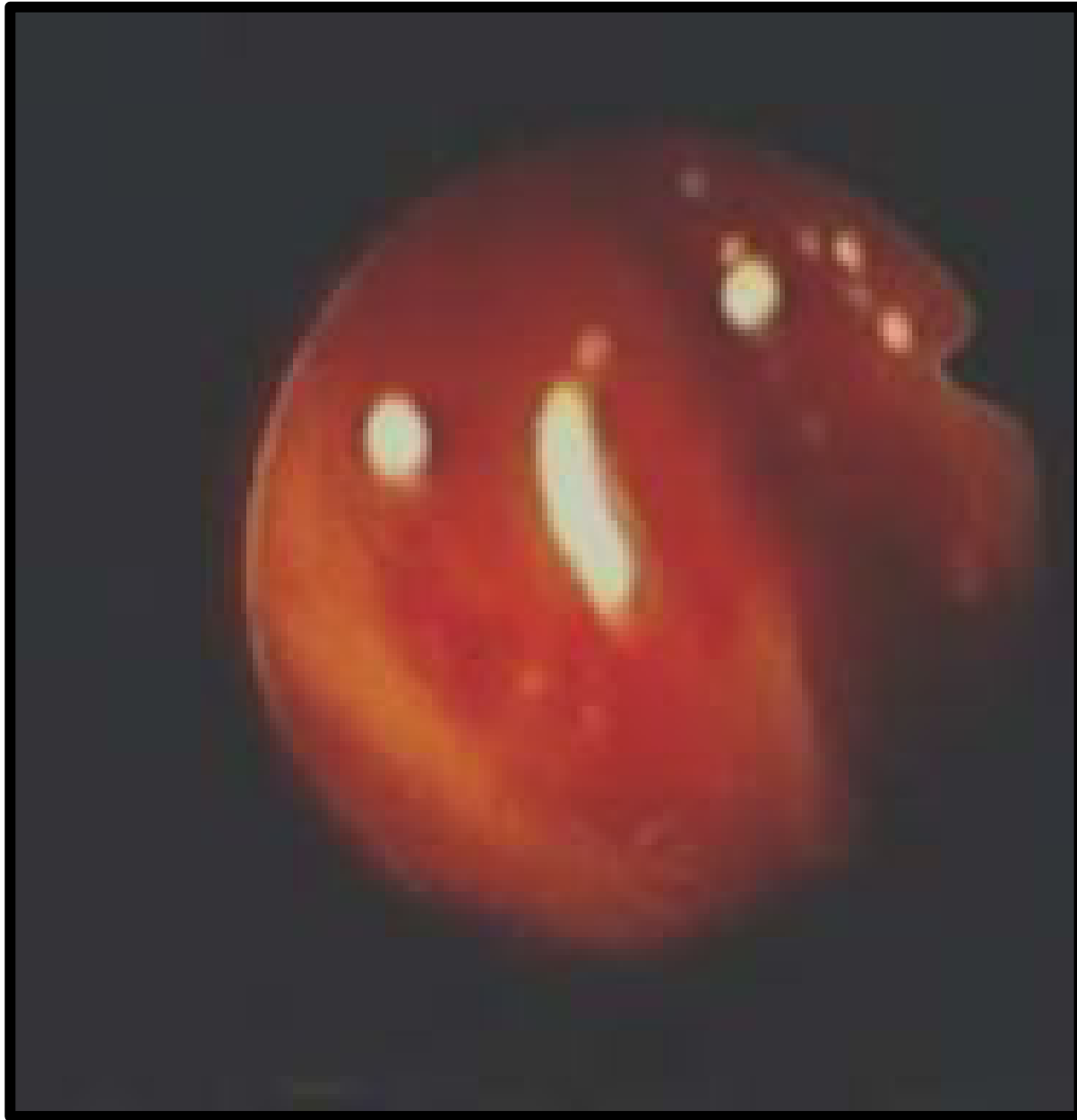
# CLINICAL POSSIBILITIES

- 1) Endobronchial Mass - ? Foreign body,  
Benign tumour
- 2) Bronchiectasis - involving right middle and  
lower lobe
- 3) Pulmonary TB - ? Relapse

# TREATMENT PLAN

Managed with antibiotics and postural drainage.

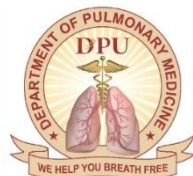
To rule out an Endobronchial lesion,  
Fibre optic Video Bronchoscopy was done.



**DPU**

Dr. D.Y. PATIL VIDYAPEETH, PUNE  
(DEEMED UNIVERSITY)

DEPARTMENT OF PULMONARY MEDICINE



Bronchoscopy revealed a red, smooth,  
pedunculated,  
Mobile Mass in the  
Right Bronchus Intermedius.

A Biopsy was taken from the same.



# CLINICAL POSSIBILITIES (After Bronchoscopy)

- 1) Benign Endobronchial tumours- ?bronchial adenoma
- 2) Neuroendocrine tumours- ?Carcinoids

# Histopathology Report

Scanty, superficial fragments of bronchial mucosa

CVTS Consult Done for advice on surgical management

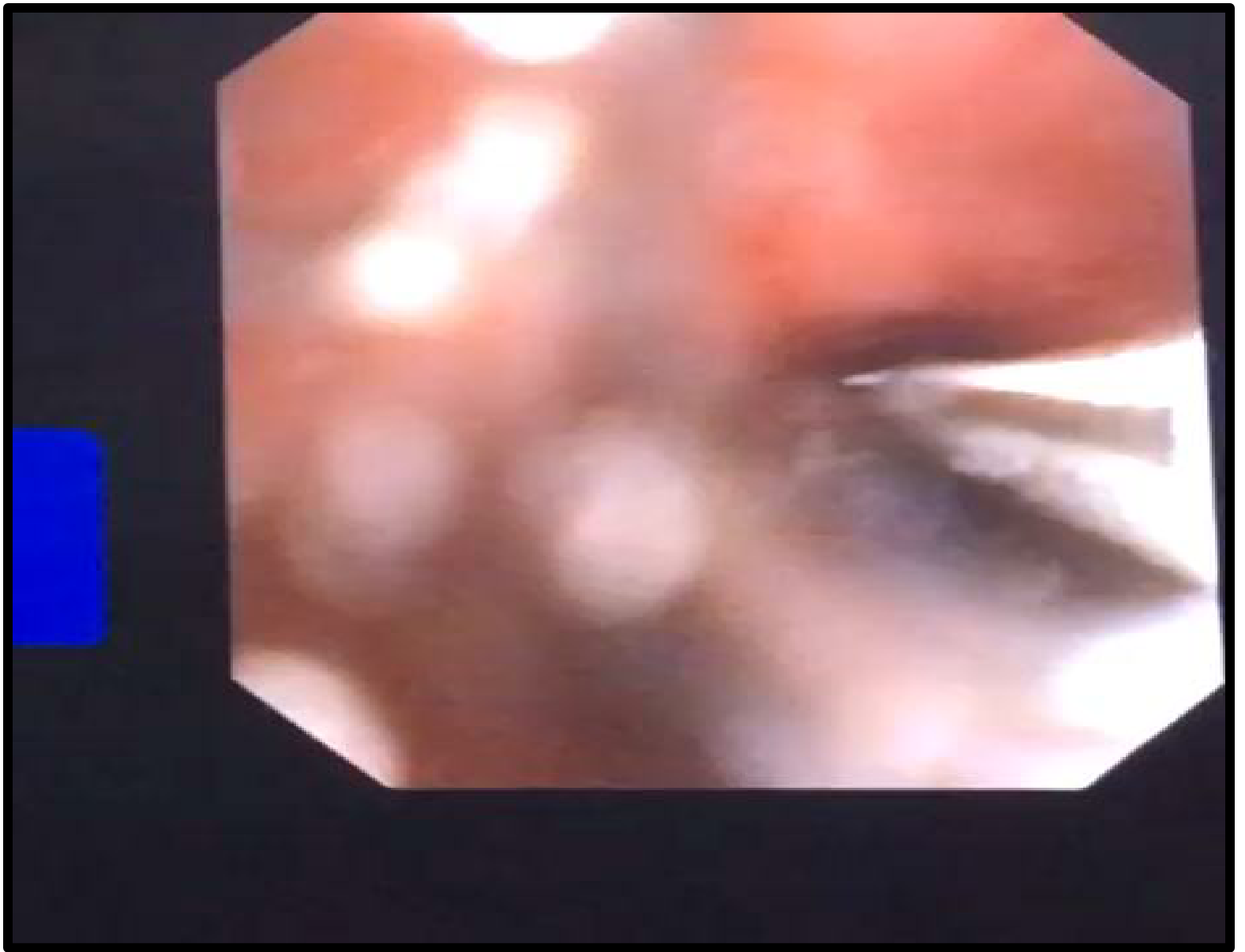


Review Bronchoscopy advised to assess the size of stump for salvaging the Right Upper Lobe



Review bronchoscopy done





# MASS DISAPPEARED!!!

She probably coughed out the mass during the episode

Only a Stalk was seen in the Right Bronchus Intermedius

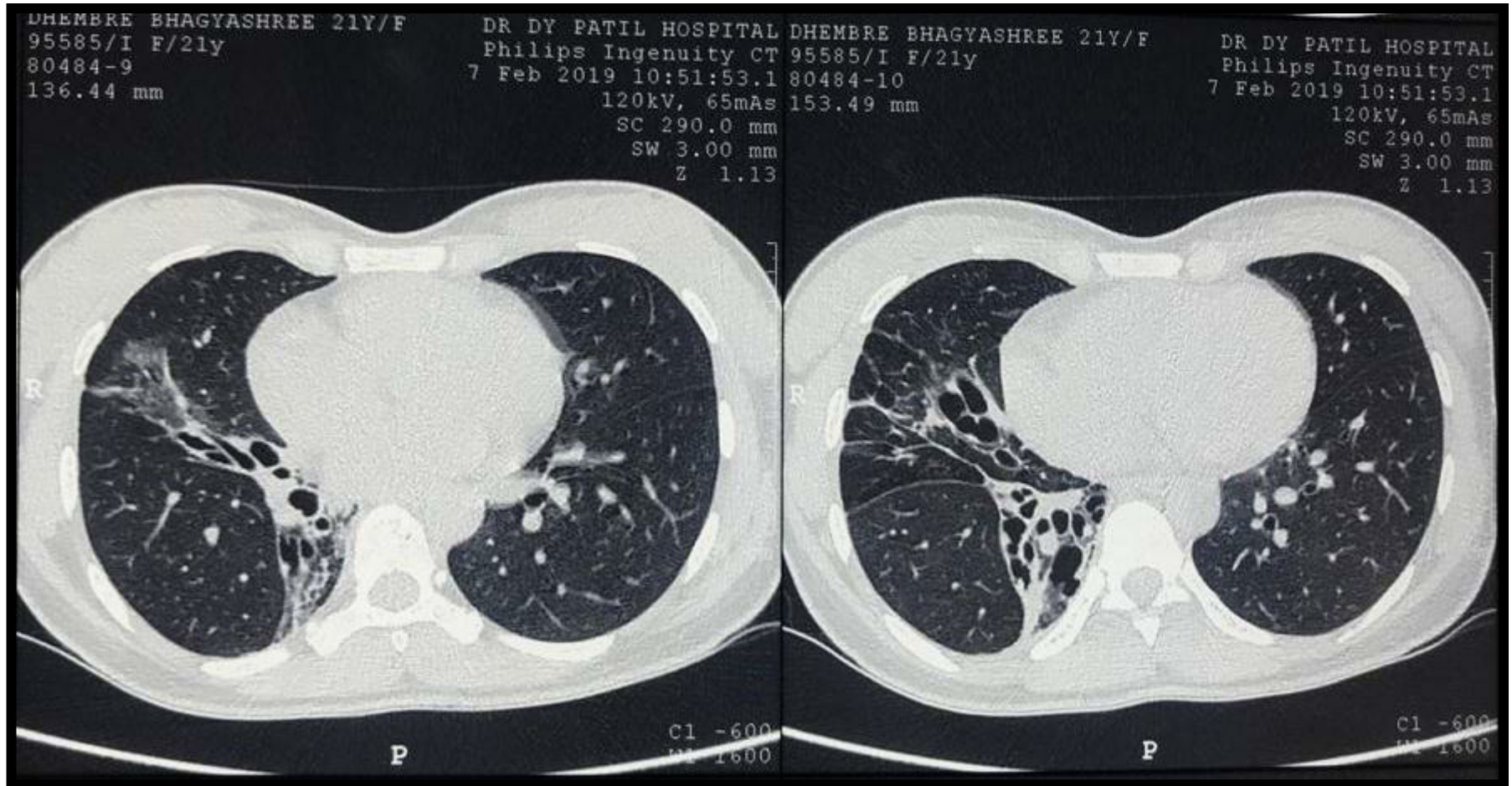
## Admission



## Post bronchoscopy



# CT THORAX – FEB 2019



# Histopathology Report of the Stalk

Bronchial Mucosa with Fibrosis &  
Neovascularisation  
Tumour cells NOT seen

# DISCUSSION

Endobronchial adenomas are classified as Mucous gland adenomas and Pleomorphic adenomas.

Mucous gland adenomas: Presents as potentially obstructing, sessile endobronchial masses arising at level of lobular/segmental bronchi.

Usually presents with cough, shortness of breath and wheeze and may be symptomatic years before presentation.

# DISCUSSION...*Contd.*

Chest X Ray may be normal/may show a Solitary Pulmonary Nodule/post obstructive atelectasis/consolidation.

Pleomorphic adenomas: Consist of stromal and epithelial elements; usually arises in major salivary glands.

Mostly found within larger central airways as polypoid exophytic tumours. They may progress into carcinoma.



# DISCUSSION...*Contd.*

Bronchial Carcinoids arise from the Neuroendocrine argentaffin cells of the bronchial mucosa and mostly present with cough & hemoptysis.

Treatment of choice in both is surgical excision.



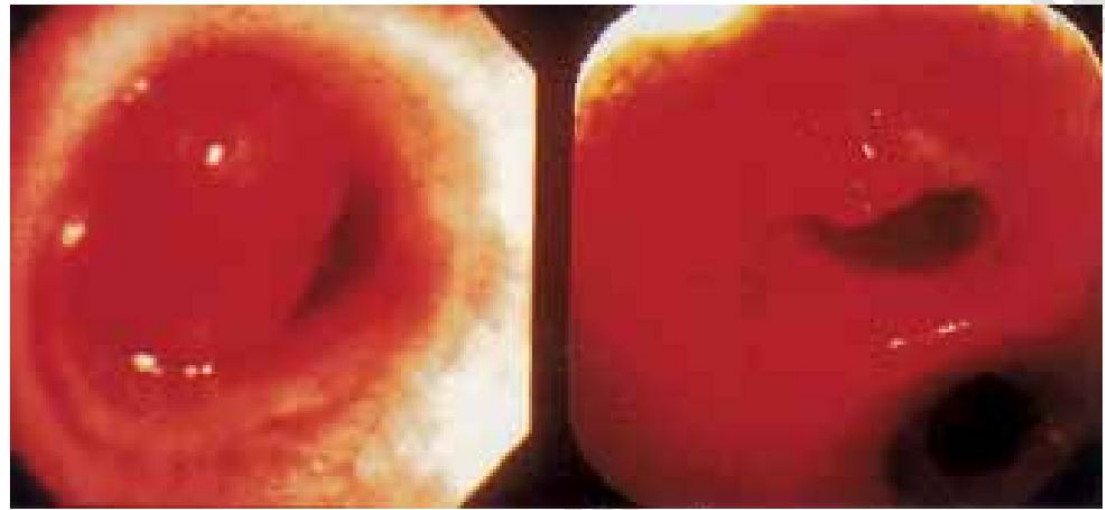
# PRESENT CASE

- Our patient possibly coughed out the adenoma during hemoptysis.
- Indian literature has not yet reported such a case.
- Only ONE such case has been reported from Kobe, Japan.

## Case Report

Respiration 2000;67:101-103

Accepted after revision: April 16, 1999



2a

2b

## Spontaneous Coughing up of a Polyp

Masahiro Terashima<sup>a,c</sup> Yoshihiro Nishimura<sup>c</sup> Hiroyuki Nakata<sup>a</sup>  
 Yasuhiro Iwai<sup>b</sup> Mitsuhiro Yokoyama<sup>c</sup>

<sup>a</sup>Department of Respiratory Disease, and <sup>b</sup>Department of Pathology, Takatsuki General Hospital, Takatsuki, a

<sup>c</sup>First Department of Internal Medicine, Kobe University School of Medicine, Kobe, Japan

## Key Words

Mucous gland adenoma, bronchus · Polypectomy

## Case Report

An 18-year-old female came to our hospital with 1 week history of a nonproductive cough and chest pain. She denied a history of fever.

**Fig. 2. a** Fiberoptic bronchoscopy shows an endobronchial mass lesion in the orifice of the right intermedius or lower bronchus. **b** The bronchial adenoma disappeared except for the root after she coughed up the soft tissue mass with sputum.

# ACKNOWLEDGEMENTS

- Department of CVTS
- Department of Radiodiagnosis

# THANK YOU