

# CLINICAL CASE

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EFIM

European Federation of Internal Medicine

# CLINICAL CASE

## History of

74-year-old  
caucasian  
male



Chronic obstructive pulmonary disease

- GOLD category C, stable in the past 2 decades



High blood pressure



Chronic atrial fibrillation (CAF)



Chronic right heart failure (HF)

- Classified as New York Heart Association functional class II



60 pack-year history of cigarette smoking  
in the past



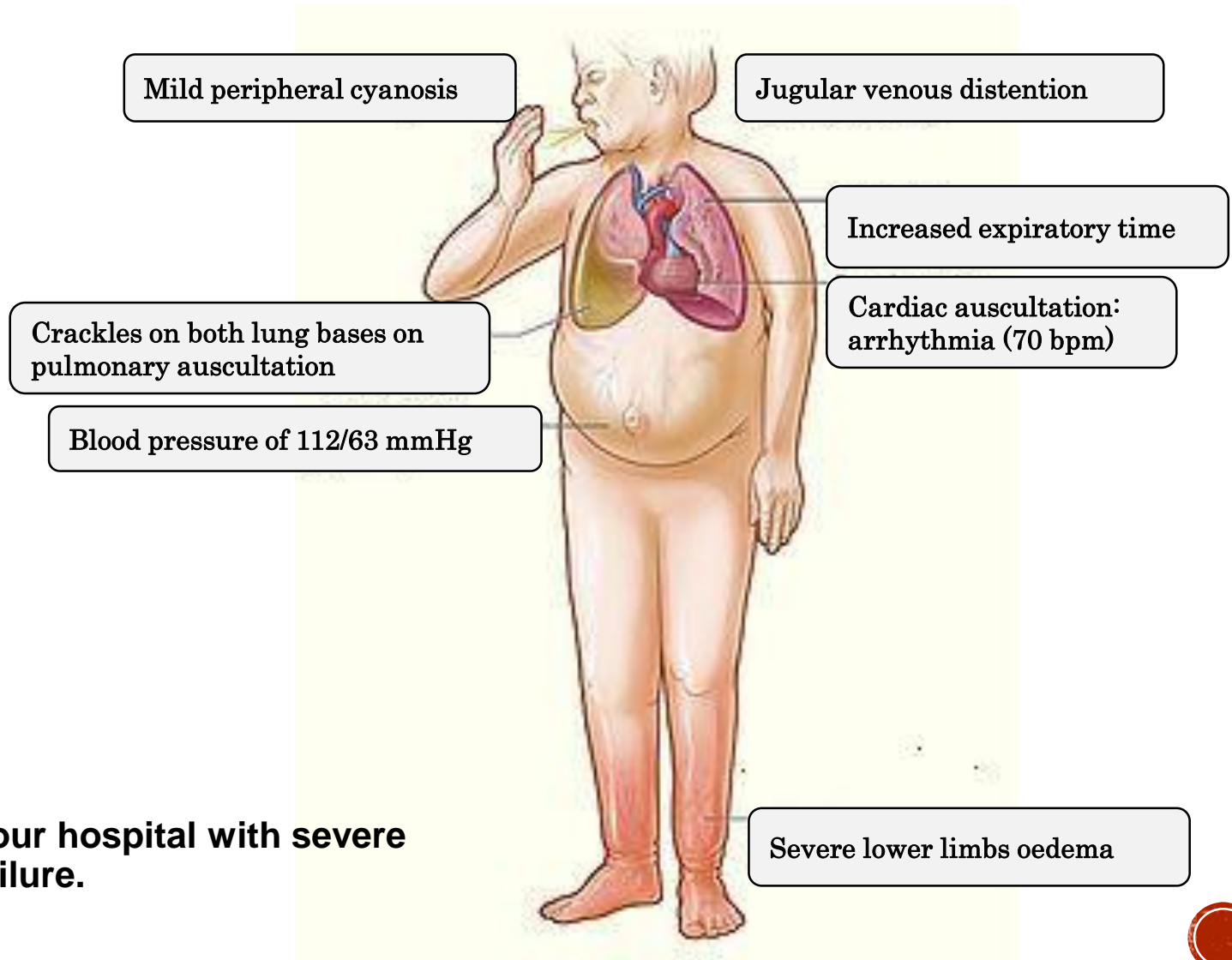
Pulmonary Hypertension due to lung  
disease (group 3)

- Transthoracic echocardiograph: “moderate to severe dilation of both atria... Mild to moderate tricuspid insufficiency. Pulmonary artery systolic pressure (PASP) of 60 mmHg...”



# MARCH OF 2012

## Physical examination



- Admitted to our hospital with severe right heart failure.

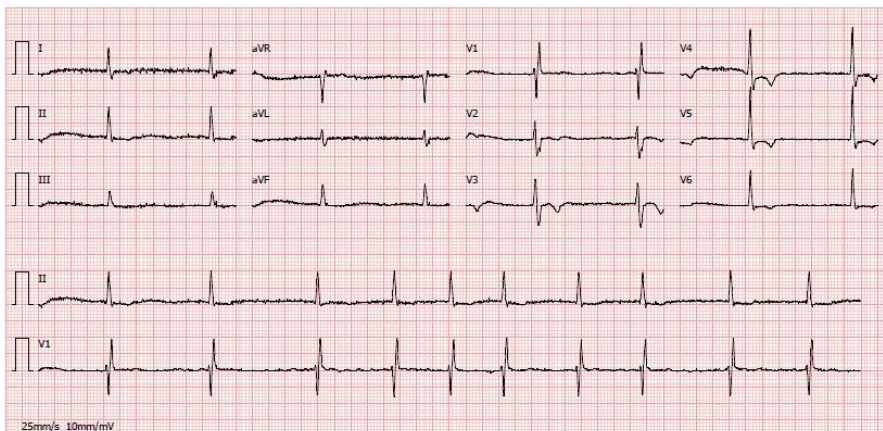




# MARCH OF 2012

## Laboratory tests

- Leukocytes count of 4100/ $\mu$ l, 59.7% neutrophils
- Hemoglobin 12.2 g/dL
- C-reactive protein 5.6 mg/l (Normal < 5 mg/l)
- **Brain Natriuretic Peptide (BNP) level elevated (577.4 pg/mL; Normal < 300 pg/mL).**

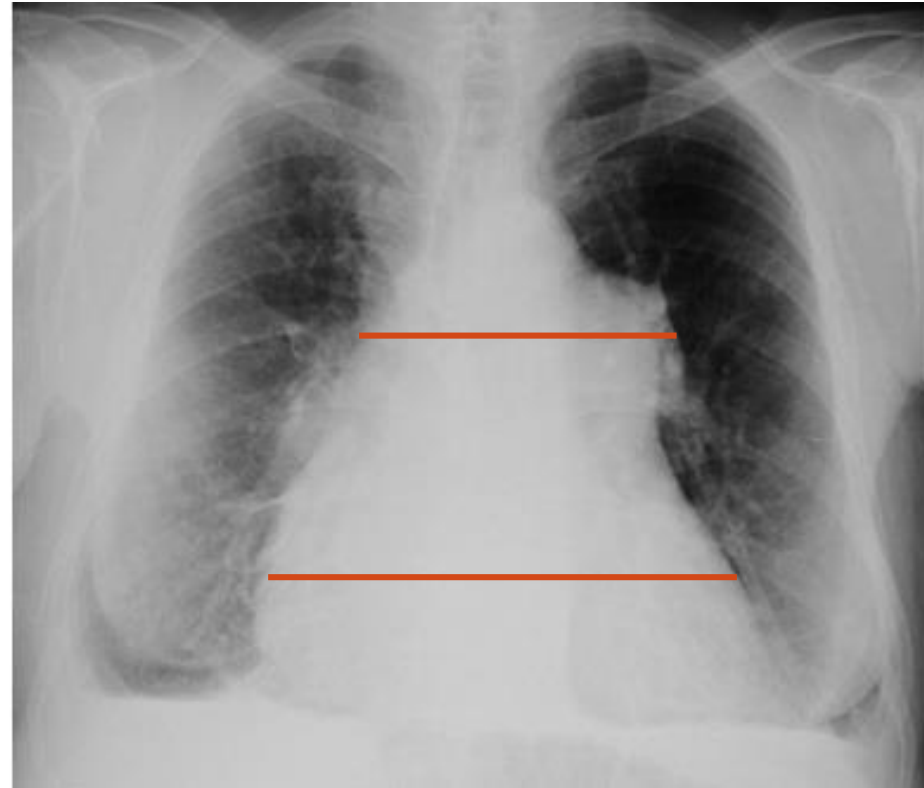


Electrocardiography - AF (63/min), no significant ST-T abnormalities

- **Admitted to our hospital with severe right heart failure.**



**2012**

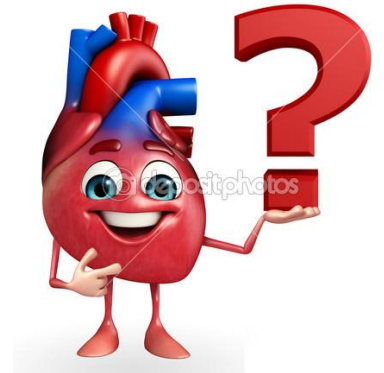


**Mediastinal enlargement**



# POSSIBLE CAUSES OF MEDIASTINAL ENLARGEMENT?

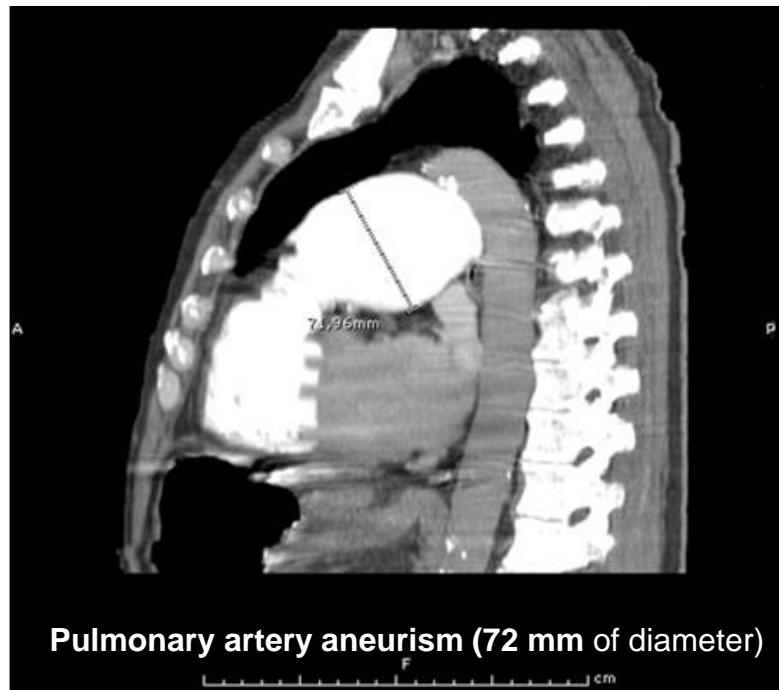
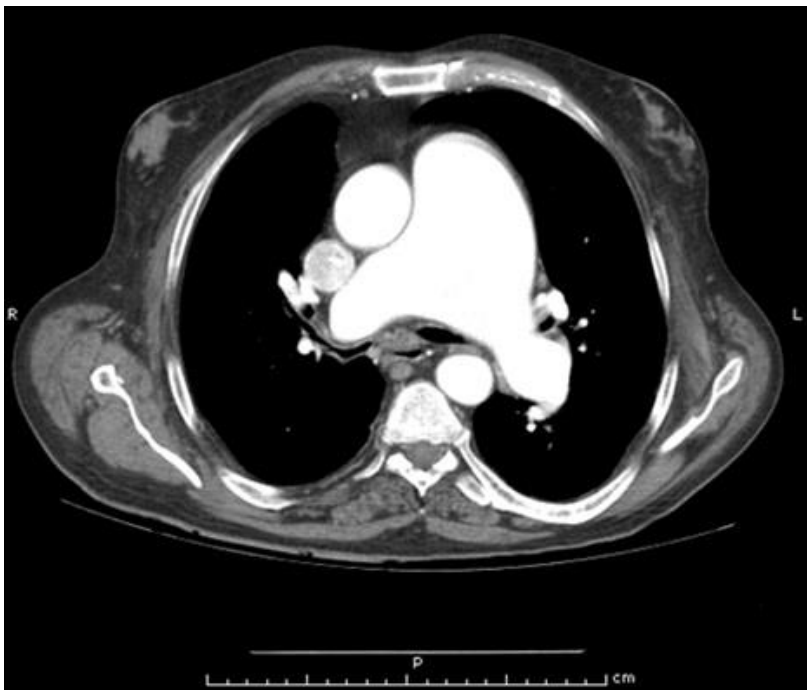
**What tests should be performed?**



The patient was admitted to the medical ward with the diagnosis of heart failure and was started on high dose diuretics with significantly clinical improvement.

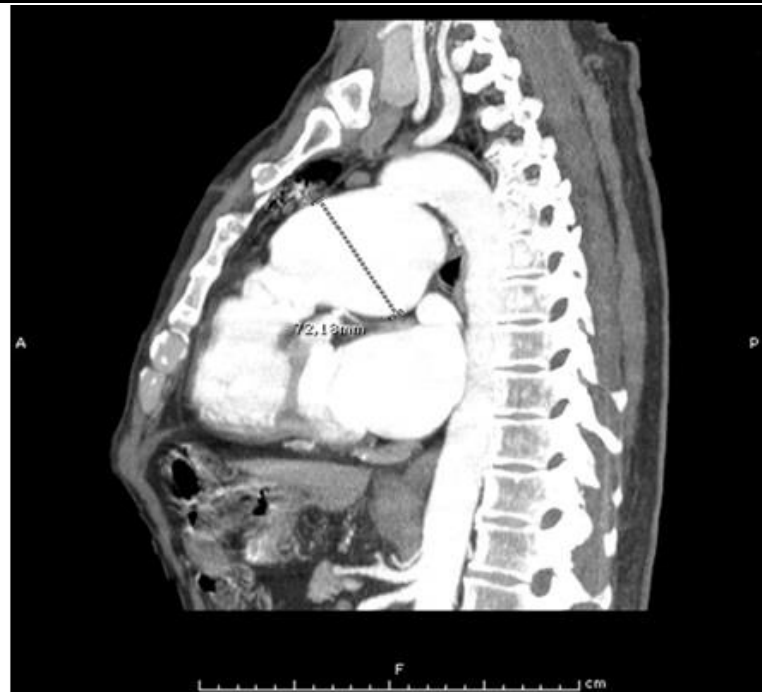


**Thoracic angio CT scan  
March/2012**



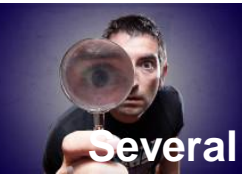
**Pulmonary artery aneurysm (72 mm of diameter)**

**Thoracic CT scan  
February/2011**

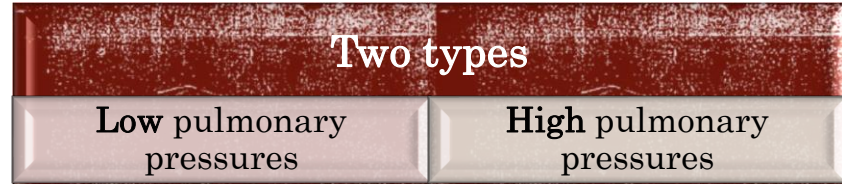


**Pronounced dilation of pulmonary trunk (72 mm), and a principal pulmonary arteries enlargement (right - 40 mm, left - 33 mm)**

# GIANT (> 50 MM) PULMONARY ARTERY ANEURYSM



## Several etiologies:



- Congenital cardiac malformations with intracardiac shunt
- Vascular abnormalities such as arteritis (e.g., Takayasu disease) and primary pulmonary hypertension
- Vasculitis (e.g., Behçet's disease)
- Connective tissue disorders (Marfan, Ehlers-Danlos and Hughes-Stovin syndrome and systemic lupus erythematosus)
- Tuberosus sclerosis
- Atherosclerosis
- Hereditary hemorrhagic telangiectasia (Osler-Weber-Rendu Disease)
- Vascular trauma
- Infections (such as tuberculosis, syphilis, bacteria or fungi)

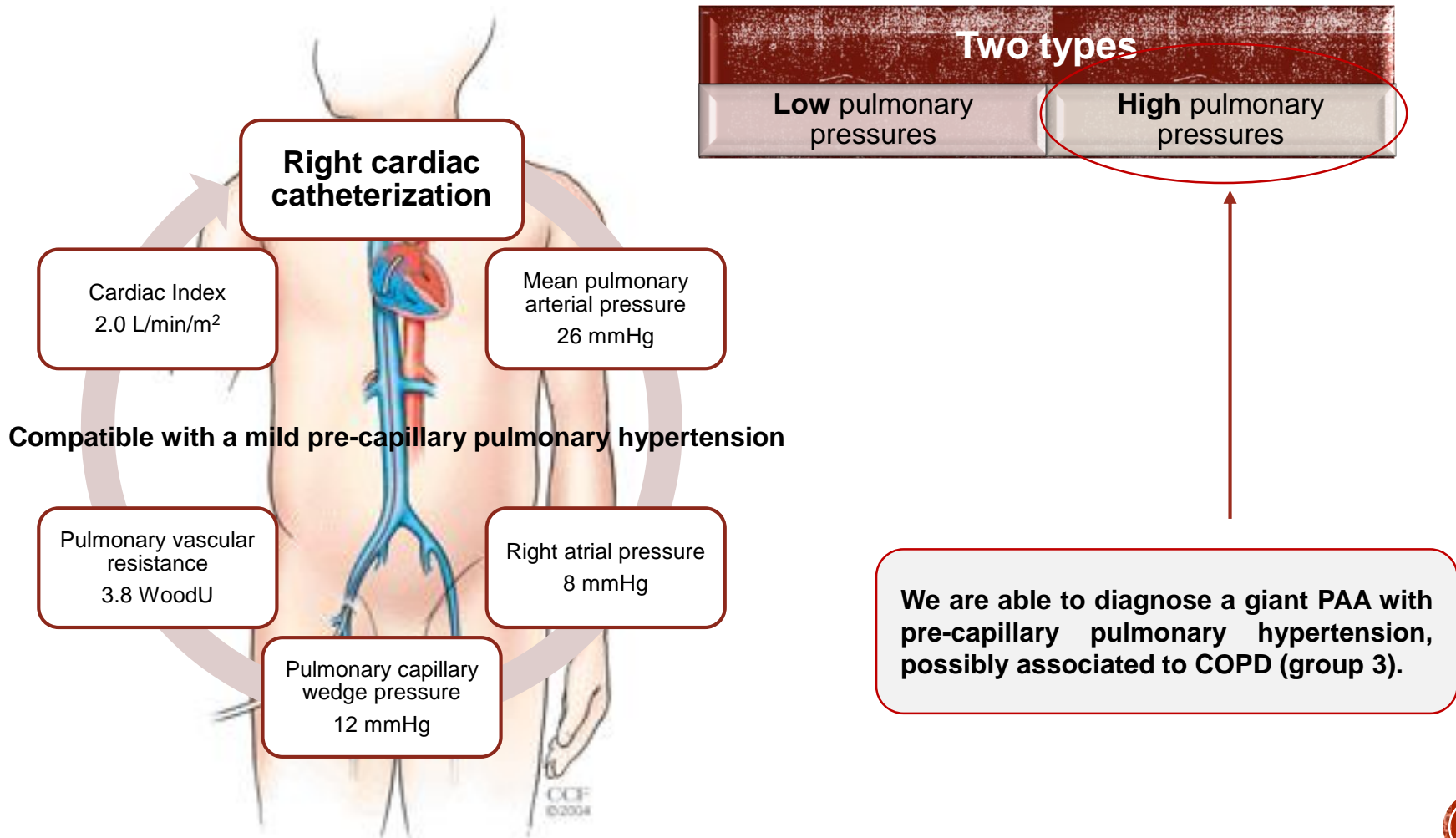
**ANA autoantibodies were negative**

**No history of major thoracic trauma in the past**

**No history of significant clinical infection in the past:  
Serology for HIV 1 and 2 and VDRL-TPHA test were negative**

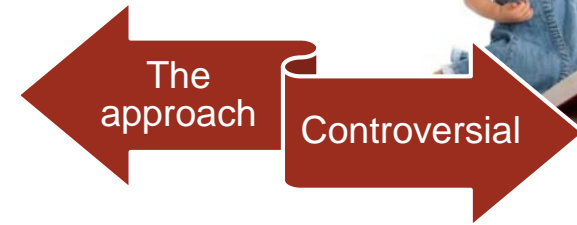


# GIANT (> 50 MM) PULMONARY ARTERY ANEURYSM



# GIANT HIGH-PRESSURE PULMONARY ARTERY ANEURYSM

RF



Many authors defend an aggressive surgical approach in a presence of severe complications

- Airway compression
- Pulmonary artery dissection
- Intravascular thrombosis

Presented case

- 20 years evolution without any significant complication
- Favoring a **conservative approach even for high-pressure uncomplicated PAA**





# THANKS FOR LISTENING

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