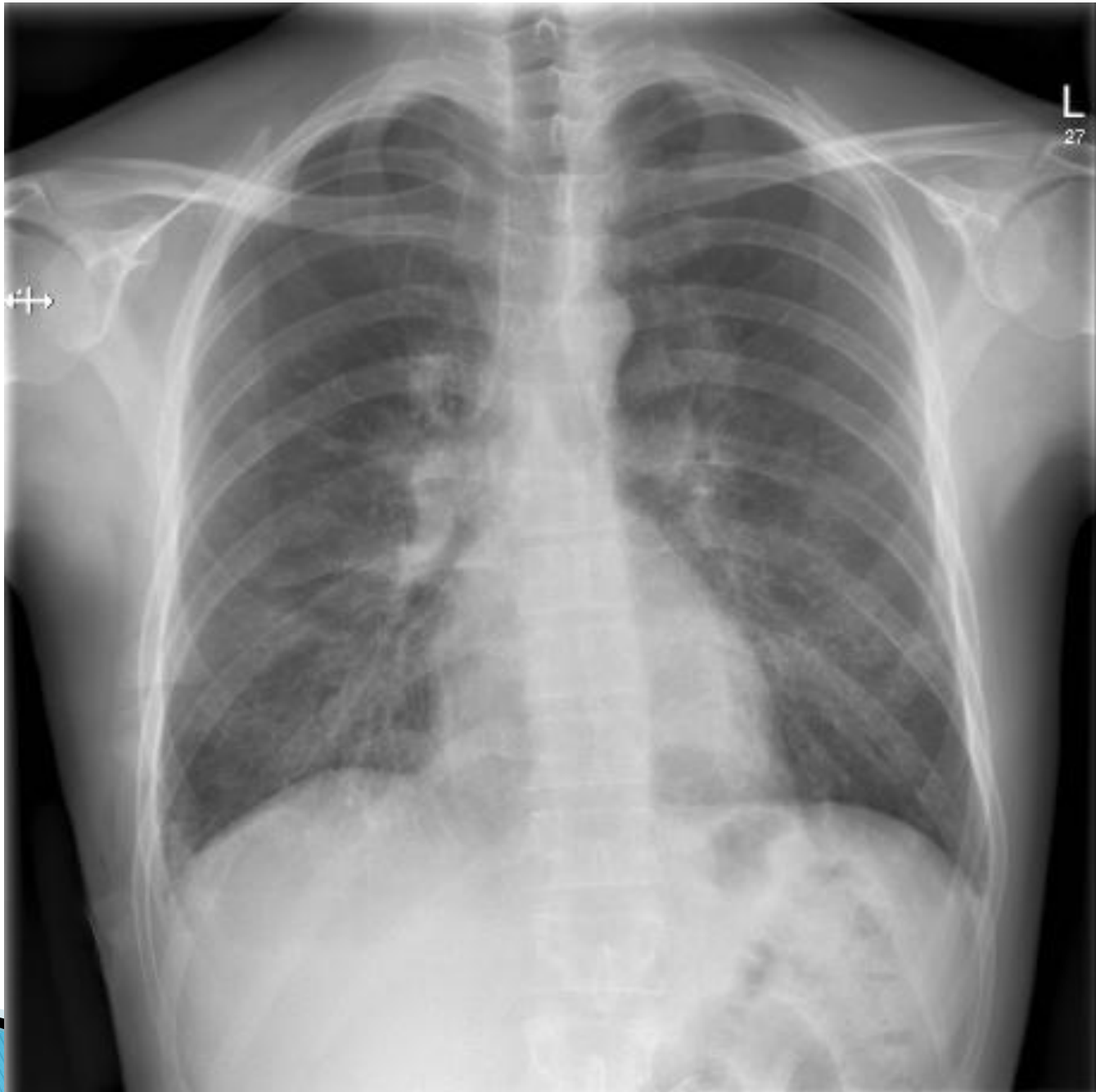


A case report

Kätlin Kirik
Liis Kiivikas

History

- ▶ Male, 41
- ▶ 2 years febrile temperatures for 3–4 days every month
 - Minor inflammatory activity
- ▶ Treatment with antibiotics several times
- ▶ Chest X–ray – bilateral shadowing of the lower parts
- ▶ CT findings (several times)
 - Ground glass opacities
 - Septal thickening
 - Deterioration from 2008





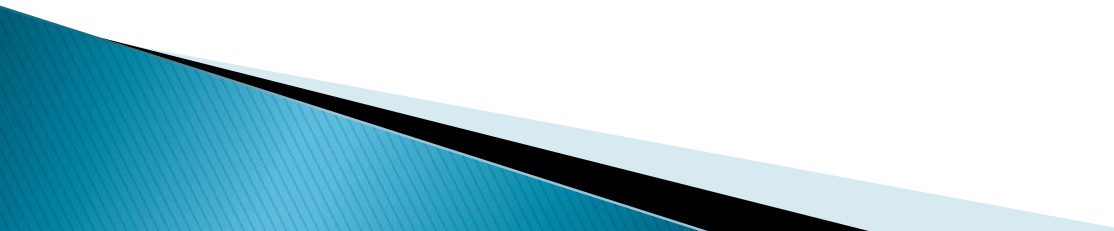
Objective findings and investigations

- ▶ **Minor crepitations**
- ▶ 10 meters walking test – **SpO2 89%**
- ▶ Spirography – **FVC 78%, FEV1 82%**
- ▶ Gas diffusion capacity – **DLCO 54,5%, KCO 70%**

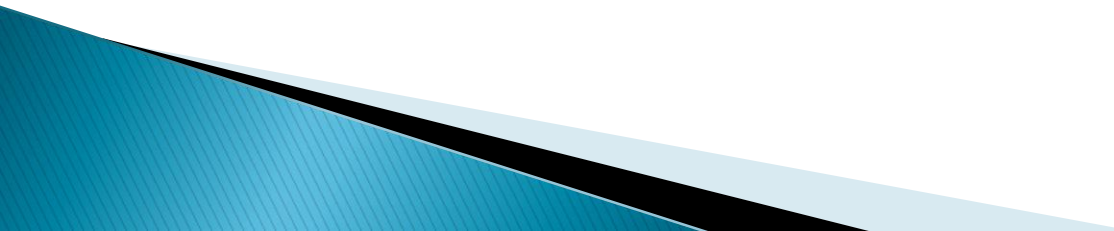
BAL fluid

- ▶ Macroscopically
 - Milky and turbid
- ▶ Microscopically
 - Proteinous material
 - 75% of macrophages
 - 18% of lymphocytes, 7% of neutrophils
 - 0% of eosinophils

Differential diagnosis

- ▶ Atypical pneumonia
 - ▶ Non-specific interstitial pneumonia
 - ▶ Hypersensitivity pneumonitis
 - ▶ Alveolar proteinosis
- 

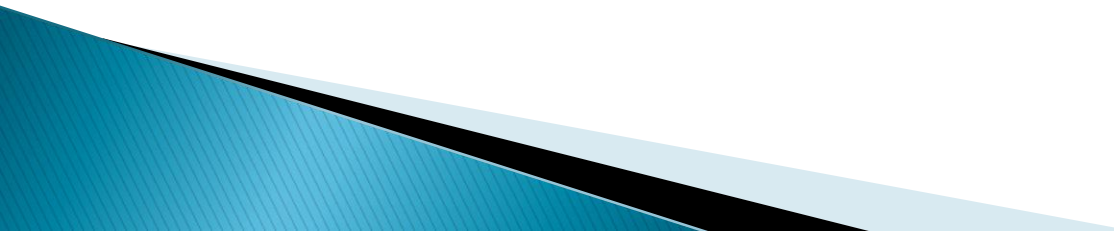
Lung biopsy (VATS)

- ▶ Alveolar structures intact
 - ▶ Alveols filled with cell-free material
 - ▶ No signs of malignancy
 - ▶ Interstitial inflammation at places
 - ▶ Pulmonary oedema
 - ▶ **Histologically suitable for alveolar proteinosis**
- 

Diagnosis

- ▶ Primary alveolar proteinosis

Alveolar proteinosis

- ▶ Rare pulmonary disease
 - ▶ Dysfunction of alveolar macrophages
 - ▶ Abnormal accumulation of surfactant in the alveoli
 - ▶ Congenital, primary or secondary (e.g. with haematological diseases)
- 

Primary alveolar proteinosis

- ▶ Anti GM-CSF antibodies
 - Granulocyte-macrophage colony-stimulating factor
- ▶ Dysfunction of macrophages
- ▶ Clinically
 - Dyspnoea
 - Cough
 - Fever (commonly subfebrile)
 - Weight loss

Treatment

- ▶ Whole lung lavage
 - General anesthesia with mechanical ventilation
 - Sequentially washing out the excess surfactant with large volumes of salt water

Thank You for listening!
Question?

