48 year old male patient was admitted to the emergency department complaining with chest pain and dyspnea after a heavy dinner. Complaints started around 1 hour ago. In his medical history, he has been suffered from chest pain and dyspnea which started only after severe exertion and it was not longer than several minutes and resolved at resting. In his last chest pain the character, duration and intensity are changed.

-In the medical history, which features of chest pain and dyspnea you should ask the patient?

- What should be considered in the differential diagnosis and life-threatening disease?

-Which tests do you want to do in the differential diagnosis?

CV-Family history: Smoke 35year of 1pocket/day. 1996: Traffic accident. DM: since 2004. Mother: CHF-exitus (70 years) Father: MI-exitus (40 years)

-What are the risk factors for coronary artery disease and chronic airway disease? For our patient?

- Take into account for diagnosis, what is difference between myocardial infarction and pericarditis?

-ECG demonstrated ST elevation in V1-V4, ST depression in inferior leads .What is your diagnosis?

-Pulmonary funciton test results are as follwed: FVC: %80, FEV1: %65, and FEV1/FVC: %60. How would you evaluate this PFT?

What is the first target in the treatment of patients? How to manage treatment?

-What are the possible complications of myocardial infarction?

After 6 months he suffered from shortness of breath on exertion. One day ago increased shortness of breath started in resting. Also he suffered from fever and palpitations. When evaluated in the emergency room, poor general condition, conscious, active, and cooperative. He had abdominal obesity. Fever as  $36.5 \degree C$  was measured. Also Room air oxygen saturation of 85%, breathing 28/minute, pulse 114/min, blood pressure 150/70 mmHg were detected. Assistant respiratory muscles are involved in breathing. Increased anterior-posterior diameter of the chest, intercostal retraction tracked. Both lungs at baseline end-inspiratory crackles are heard and diminished breath sounds in the left lung and prolonged. Patients with tachycardia. S1, S2 normal, S3 + additional murmur can not be assessed. No hepatosplenomegaly. No ascites. Peripheral edema ++/++. All pulses can detected. There are superficial varicose veins in the lower extremities. Right leg diameter and temperature were increased. No neurological sequelae.

- What is the most likely diagnosis. For differential diagnosis which tests should we do?

-What is the NYHA (New York Heart Association) classification ?

-What are the physical examination findings in dyspneic patient for diagnosis?

- What are the other diagnostic tests in dyspneic patient?

Chest radiograph showed that; costodiafragmatic sinus was closed and butterfly congestive appearance was present. ECG revealed sinus rhythm and left ventricular hypertrophy. Complete blood count WBC: 8.000/µl, Hb: 17 Htc: 57 PLT: 250000. ABG: pH 7.33, PaO2: 57.4 mmHg, PaCO2: 52 SaO2 85% (room air) blood glucose 200 mg / dl, creatinine 1.38 mg / dL. Total cholesterol 270 mg / dL, LDL cholesterol 160 mg / dL, HDL cholesterol 35 mg / dL, triglycerides 300 mg / dL. Electrolytes are normal. Cardiac enzymes are normal., BNP: 884 pg / ml. echocardiographic left ventricular systolic dysfunction EF: is 30%.

What is your best diagnosis and treatment? What should we do?

To reduce the risk of cardiovascular events in these patients, what should be done?