#### CLINICAL CASE PRESENTATION

**WESIM 2014** 

#### YOUNG MAN

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# 23-years old man...

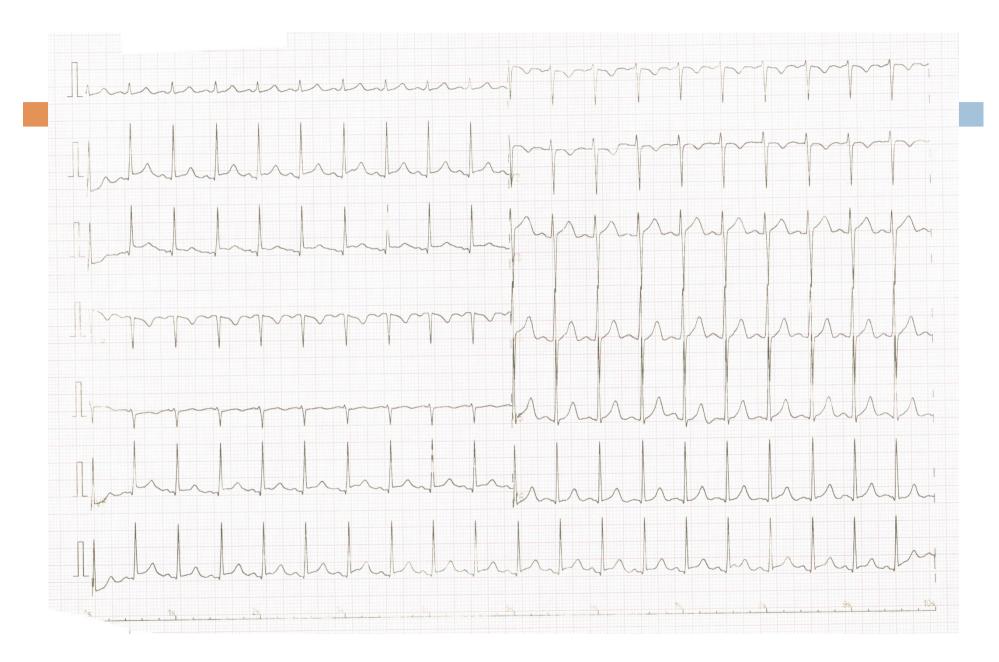
Arrives to ER around 22:00 for chest pain, which started in the morning, lasts since then, describes it as pressure, pain radiates from behind sternum into back – between shoulder blades, it's worse with movement, chest painful on touch.

#### Any other symptoms?

- ❖ he also coughs since morning plus he vomited 3 times today in last vomit was blood a bit.
- ❖ Subfebrile 37,6 grades of Celsius

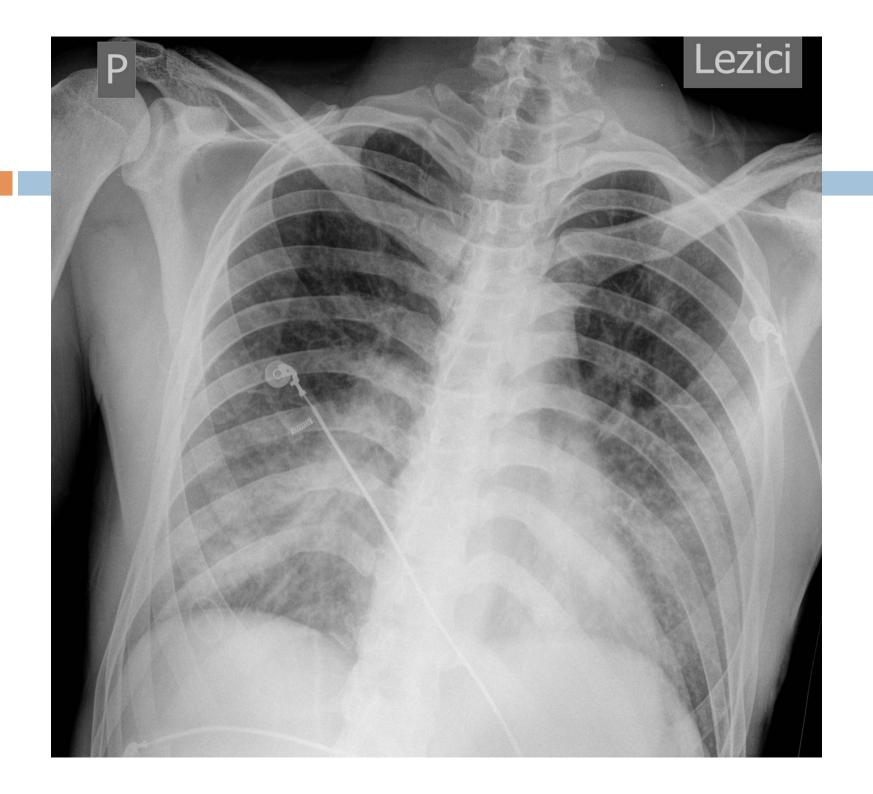
#### Something interesting in patient's history?

- Healthy, no medication, no alergies
- ❖ Smokes 20 cigarettes a day, admits drugs occasionally (marijuana, meth)
- ❖ Loud heart murmur also described in examination a year ago



# Laboratory findings

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CRP 108.5 mg/l (< 7.5 mg/l)
Na 132 mmol/l (136 - 144 mmol/l)
K 3.66 \text{ mmol/I} (3.6 - 5.1 \text{ mmol/I})
Cl 100 mmol/l (101 - 111 mmol/l)
Glucose 6.1 mmol/l (4,00 - 5,59 mmol/l)
Proteins 70.8 g/l (61 - 79 g/l)
Albumin 25.7 g/l (35 - 48 g/l)
CKMB mass 0.50, 0.60 ug/I (0,60 - 6,30 \mu g/I)
Troponin I 0.017, < 0.01 (< 0.04 \mu g/I)
Leukocytes 9.3 x 10^9/1 (4 - 10 x 10^9/1)
Neutrophils 82% (relative count, 45-70%)
Hemoglobin 88 g/l (135 - 172 g/l)
Trombocytes 241x10<sup>9</sup>/I (150-400x10<sup>9</sup>/I)
Renal parameters, liver enzymes, urine - normal
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### Further investigation

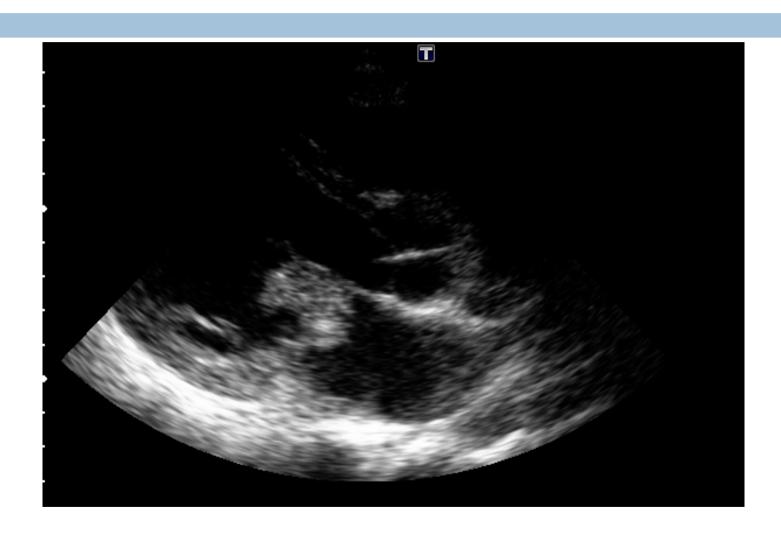
Gastroscopy: erosions of stomach and duodenum

**Blood cultures**: negative (repeatedly)

**Abdominal ultrasound:** hepatosplenomegaly >>>> CT scan



# Due to heart murmur and changes on ECG>>> **Echocardiography:** vegetation on mitral valve (anterior mitral leaflet)



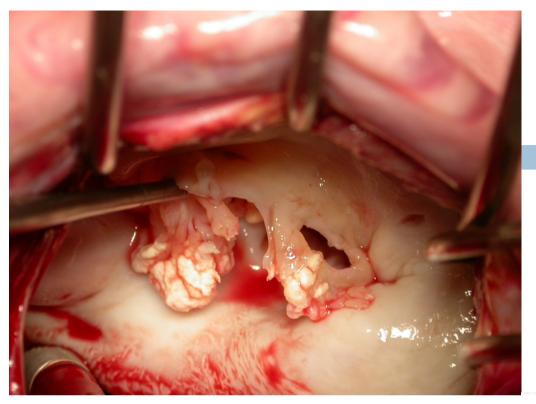
## The story continues

- -Febrile/subfebrile almost every day
- -Severe neutropenia -2% (45-70%) >>>> ATB changed (gentamicin + ampicillin + amoxicillin changed to ampicillin + ciprofloxacin + fluconazole)
- -Serology negative (HBsAg, HCV, anti HIV 1, 2, anti EBV, anti CMV, anti Borrelia , anti M. pneumoniae , anti Ch. pneumoniae , anti Ch. Trachomatis, Toxoplasma )
- -lgA immunodeficiency
- ❖ After month of inpatient treatment patient decides to leave hospital continues with oral ATB therapy
- ❖ In 3 weeks returns with serious abdominal pain spleen infarction, after LMWH treatment and observation discharged.
- ❖ Another 1 week and he is back signs of congestive heart failure >>> patient transferred to faculty hospital for mitral valve replacement



#### Infective endocarditis

- -Incidence > 2-6 cases per 100 000 people per year
- -i.v. drug users > 100 times higher incidence, typically are vegetations on tricuspid valve
- -The most frequent cause > Staphylococcus aureus
- -90% of patients present with fever, often associated with systemic symptoms of chills, poor appetite and weight loss.
- -Heart murmurs are found in up to 85% of patients
- -Classic textbook signs are increasingly uncommon patients generally present at an early stage of the disease
- -Immunological phenomena, such as splinter haemorrhages, Roth spots and glomerulonephritis, are now less common, but emboli to brain, lung or spleen occur in 30% of patients and are often the presenting feature.
- -Investigation to exclude IE are essential in at-risk groups (i.v. drugs, artificial heart valves...)



# Thank you for your attention

