



**Rostov State Medical University
department of internal medicine #1**

Case presentation

Fever of unknown origin

Kolomatskaya Olga

**Latvia, Riga
February 2017**

Patient A., 26 years old

Complaints:

temperature 38,0 – 38,5°C,
general weakness, fatigue

Patient history:

The first symptoms appeared in December 2015, when the temperature rise varied from 37 to 38.5° C for a few weeks



Routine diagnostic techniques:

✓ **Patient medical history** –surgery, invasive surgery, drug taking, penitential period, travels, injuries, drug intake, and fever in family history – ***no previous history***

✓ Physical examination is ***within normal***

✓ Thoracic organs X-ray – ***without pathological findings***

GBA + reticulocytes

Biochemical blood tests

CUA

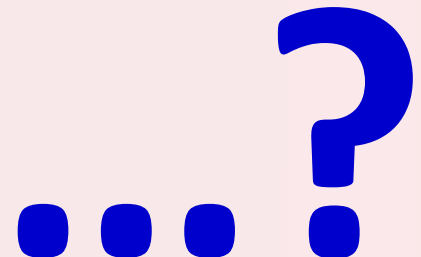


WNL

✓ Microbiological blood and urine tests – ***without abnormal microflora***

✓ Antinuclear and rheumatoid factors – **WNL**

✓ Serological diagnosis - of HIV, CMV, Epstein-Barr virus, hepatitis viruses B and C - ***negative***



- ✓ What is the main syndrome?
- ✓ What diseases should we exclude in the first place?
- ✓ What is the algorithm for further actions?
- ✓ What diagnostic techniques should be assigned?



FUO !?

... 40% ... infectious and inflammatory processes ???

*... 37% ... malignant tumors ??? ...
Unlikely!*

*... 15-39% ... non-infectious inflammatory diseases
???*



Infectious and inflammatory processes ???

- ✓ Tuberculosis
- ✓ Suppurative diseases of the abdominal cavity
- ✓ Infective endocarditis
- ✓ Osteomyelitis
- ✓ ...

Non-infectious inflammatory diseases ???

- ✓ Rheumatic diseases (SLE, pseudorheumatism, ...)
- ✓ Adult Still disease
- ✓ Vasculitides
- ✓ Crohn's disease, ulcerative colitis
- ✓ ...

- ✓ abdomen ultrasound
- ✓ kidneys, bladder,
prostate ultrasound
- ✓ heart ultrasound
- ✓ thyroid ultrasound

without abnormal changes

- TSH 1.34 mIU / L (Norma 0.34-5.60)
- C-reactive protein 6.9 mg / L (Norma 0-5.0)
- CRP-2 (high sensitivity) **18 000** mg / L (Norma is up to 3000)
- antistreptolisin O 33,8 IU / ml (Norma up to 250)
- antibodies to deoxyribonuclease 75,8 IU / ml - Norma
- IgE 61 IU (Norma <100)
- IgA 3.21 g / L (Norma 0.3-3.5)

- ✓ **Rheumatoid factor** <20 IU / ml (N up to 25)
- ✓ **Antibodies to double-stranded DNA (IgG)** 17.6 IU / ml
- ✓ **LE-cells** not found
- ✓ **ANA-screen** 0.30 COI (<1)
- ✓ **Antibodies to phospholipids IgM** 9.8 U / mL (<10)
- ✓ **Antibodies to cardiolipin** 9.10 rel. u / ml (<12)

HLA-B27 *has been found!*

X-rays of hands: There is some periarticular osteoporosis, singular cystic lucency in distal phalanges, subchondral sclerosis.

Ultrasonography of shoulder joints:

Ultrasound signs of shoulder joints AD on both sides. Subdeltoid and subacromial bursitis on both sides.

X-ray of knee joints:

Irregular narrowing of joint gaps. Almost non-expressed subchondral sclerosis of articular surfaces. Some sharpening of intercondylar eminences. Non-identified muscular-destructive changes.

Conclusion: X-ray signs of 2-sided osteoarthritis of 1-2 degrees

Feet X-ray:

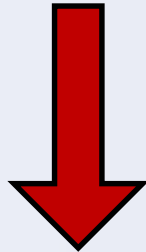
Slight regional osteoporosis, subchondral sclerosis. Narrowing of joint gaps of interphalangeal joints.

X-ray of ileosacral joints:

with joint gaps and expressed subchondral sclerosis of 2nd degree

Diagnosis criteria (ASAS, 2009):

Sacroiliitis on the basis of imaging
+ HLA B27
+ CRP upregulation



**Ankylosing
spondylitis, HLA B27+,
2nd degree, JI 0**



Treatment

- ✓ basic anti-inflammatory therapy
Sulfasalazine 500 2 pills twice a day
- ✓ nonsteroidal anti-inflammatory drugs
Ibuprofen twice a day
- ✓ **Ketorol I.M.**
- ✓ Vitamins **B12 I.M., Complivit**
Calcium D3

- ✓ **Physical therapy**
- ✓ **Physiotherapy treatment, massage**



A stylized world map is centered in the background, rendered in a light blue color. The map is set against a background that transitions from a light blue at the top to a light red at the bottom. The text "Thank you for your attention!" is overlaid on the map in a large, bold, dark blue font with a white outline.

**Thank you
for your
attention!**