

The Swiss Case Report



Sara Ersözlü

Resident, Department of Internal Medicine

University Hospital Zurich, Switzerland



UniversityHospital
Zurich

1. Initial Presentation: 66-year old female



Delirium
RR 250/110mmHg



Aspiration
pneumonia,
convulsion

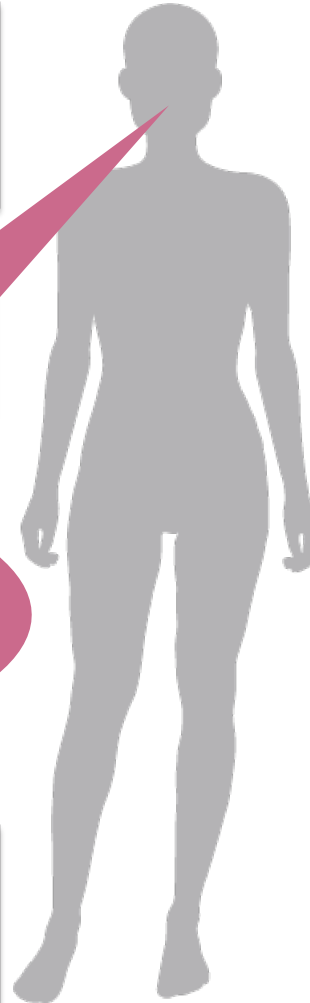


- 2 months persisting high CRP
- **infection of unknown origin**
- poor general condition

- tiredness
- general feeling of sickness
- weight loss (8kg/1.5 years)
- Itching skin and eyes
- joint pains

Previous antibiotic treatment:

1. Amoxicillin/ Clavulanic acid 1825mg/d (7d)
2. Clindamycin 1200mg/d (10 days)



Previous medical history:

- Hypertension
- Hashimoto thyroiditis
- HWS distortion, pain syndrome
- Recurring panic attacks
- Uveitis anterior
- Hysterectomy

Current medication:

- Enalapril 5mg/d
- Amlodipin 5mg/d
- Levothyroxin 0.075mg/d
- Colecalciferol 7400IE/d
- Calcium 500mg/d

Basic Info/ Vital Parameters:

- BD 134/71mmHg P 94/min
- 37°C
- 165cm, 70kg (BMI 25)
- ex-smoker (30py)



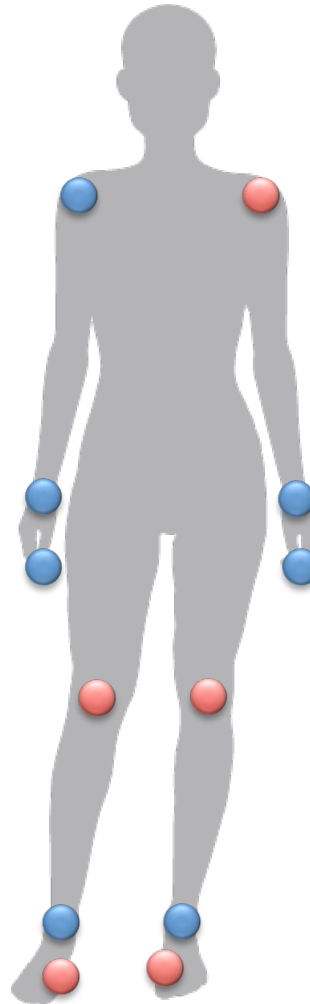
1. Initial Presentation: 66-year old female

Basic Laboratory Work-Up:

- **CRP 98 mg/l** (<5)
- Leukocytes ()
- **TSH <0.01mU/l** (0.16-4.25), fT3/4 normal
- **Alkaline Phosphatase 107 U/l** (35-104)
- **γ -Glutamyltransferase 44 U/l** (<40)
- **NT-pro BNP 487ng/l** (<301)
- **Hemoglobin 102g/l** (117-153)
- Spot urine: **55 leucocytes** (<16/ul)

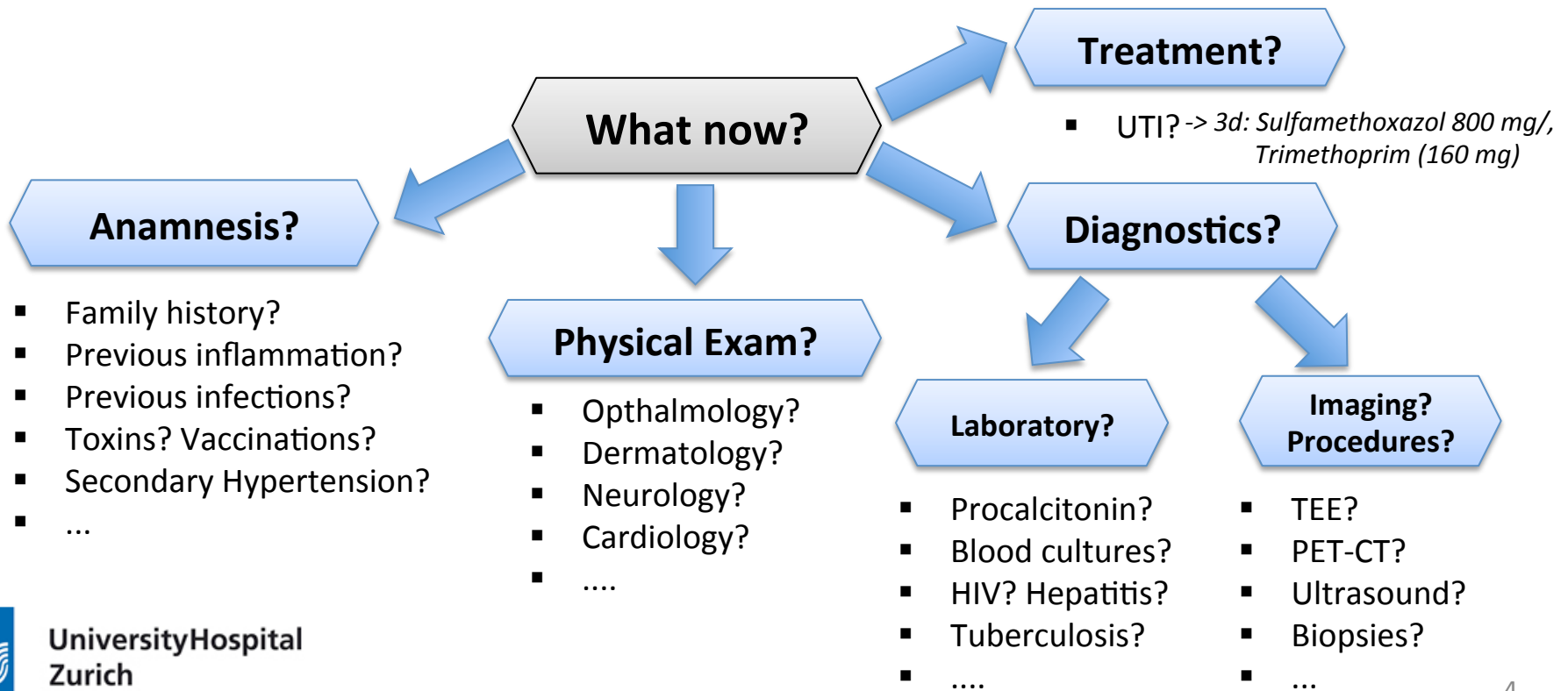
Previous diagnostics:

- Brain CT, brain MRI -> normal
- EEG -> normal
- ECG -> normal
- Chest X-Ray
- Bone Scintigraphy



2. Key Points and Strategy for the Case Work-Up

Symptoms	Pathological findings	Medical history
<ul style="list-style-type: none"> Fatigue Malaise Weight loss Arthralgia Itching 	<ul style="list-style-type: none"> Elevated inflammatory parameters Elevated liver parameters Urinary tract infection Prurigo simplex subacuta Normocytic normochromic anemia 	<ul style="list-style-type: none"> Recent uveitis anterior Hypertensive crisis Delirium of unknown cause Hashimoto thyroiditis



3. Main Hypotheses

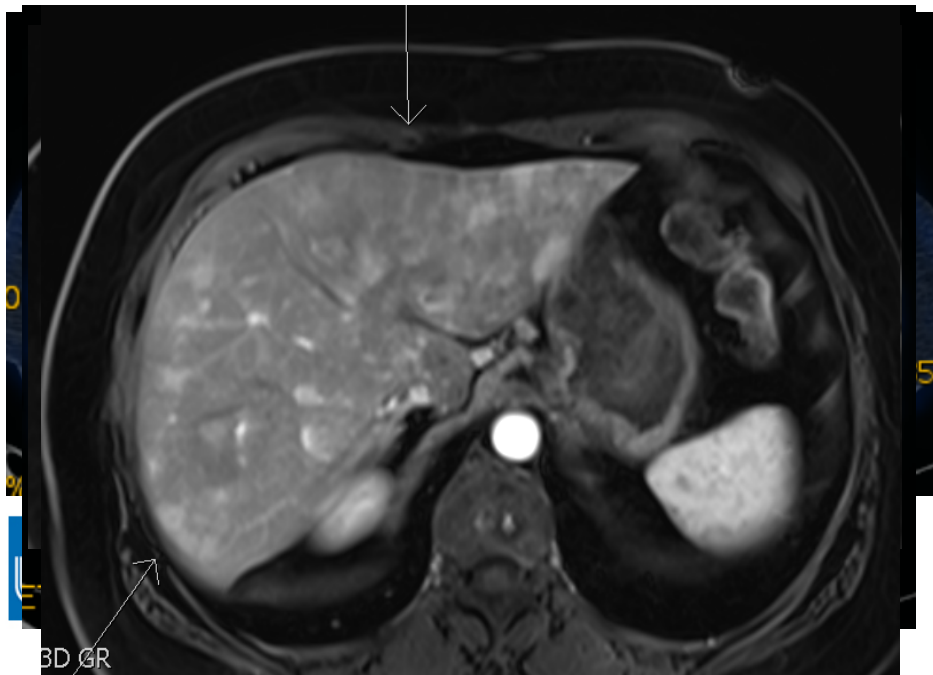
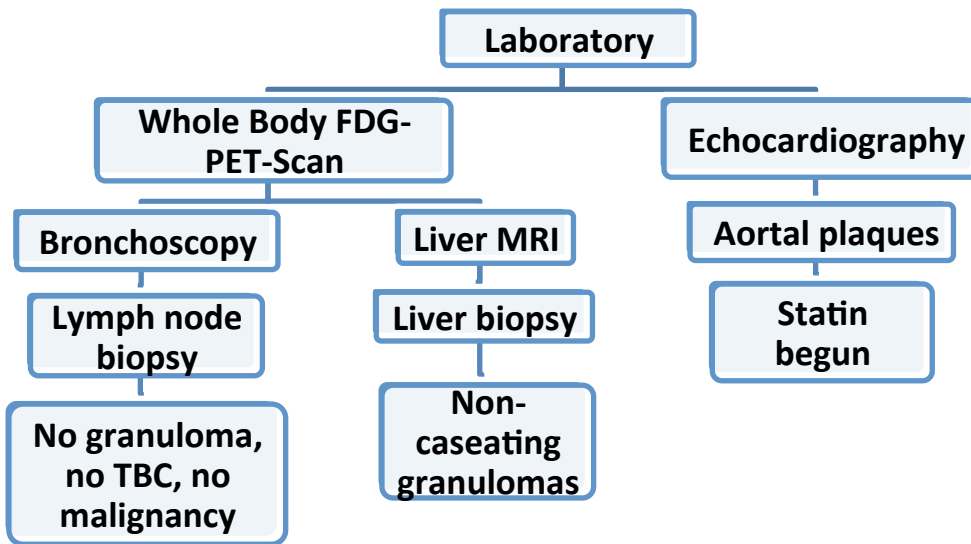
Systemic inflammatory disorder

or...

- **Infection?**
- ...



4. The Diagnostic Work-Up



Additional laboratory Work-Up:

Infection:

- Procalcitonin 0.01ug/l (<0.1)
- Blood cultures remained negative
- HIV, Hepatitis B/C negative, Lues negativ
- CMV IgG positive, IgM negative
- EBV IgG positive, IgG negative
- **Quantiferon Test 3.5IU/ml (<0.35)**
- Urinsedimentation normal, no caluria

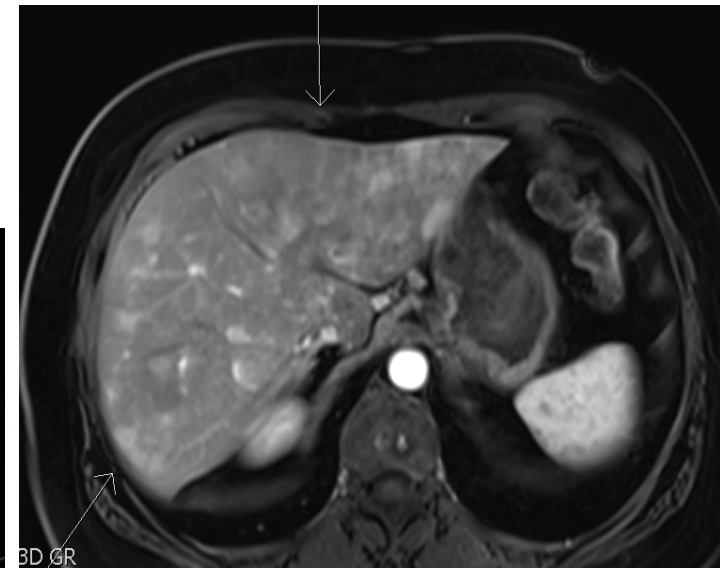
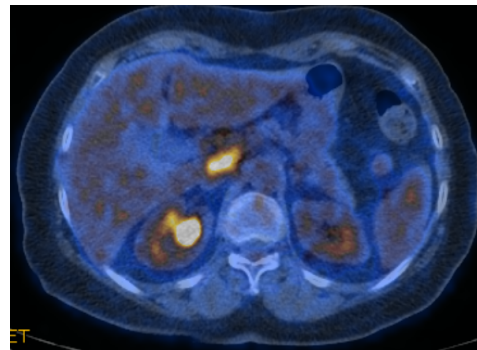
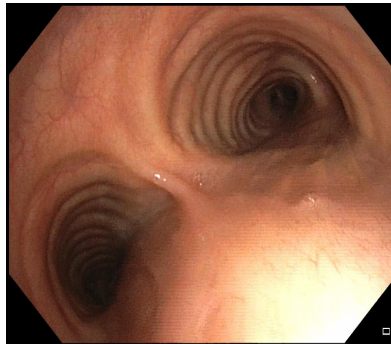
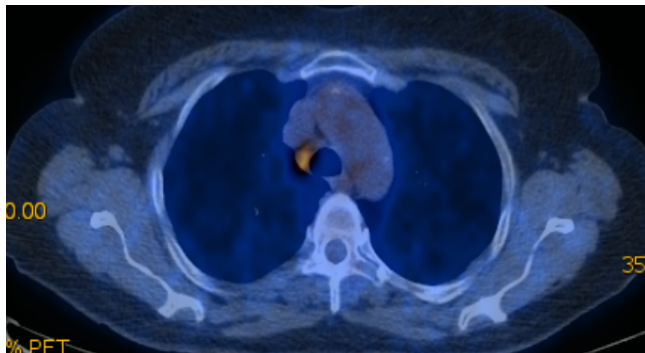
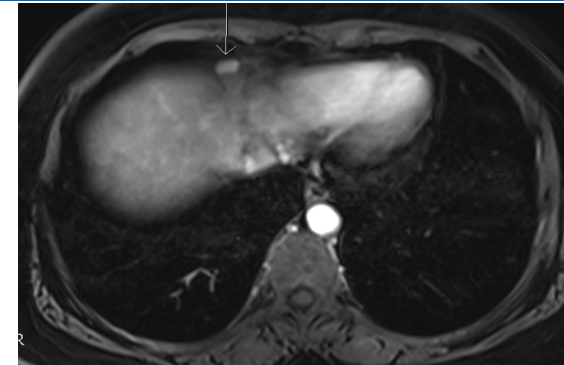
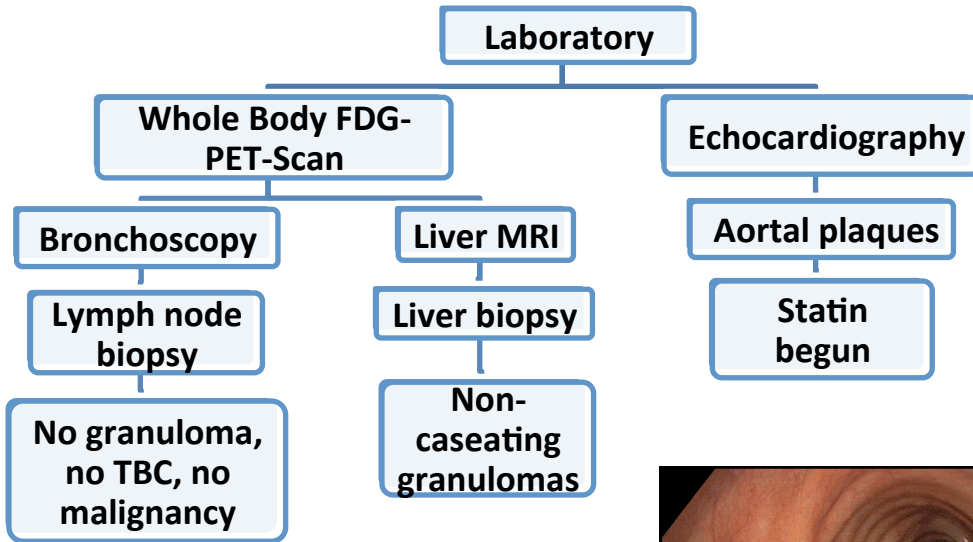
Rheumatology and Immunology:

- **Erythrocyte sedimentation rate 98mm/h**
- **ACE level elevated**
- Rheuma factor negativ (< 20IE/ml)
- **ANA 1:640 (>1:320)**
- atypical ANCA Titer 320 (<20)
- MPO/PR-ANCA 0
- Immunoglobuline IgG, IgA, IgM normal
- Immunofixation normal
- Complement factor C3/C4 nromal
- 1,25-OH and 25-OH vitamine D normal

▪ **Aktive TBC?**

- **3x sputum negative**
- **BAL negative**
- *Bartonella henslae, Brucella negative*

4. The Diagnostic Work-Up



6. The Diagnosis and Treatment

With liver & eye involvement

Sarcoidosis

vs. **Tuberculosis?**

Treatment under immunosuppression

Check for and manage steroid side effects & REDUCE !

Therapy:

Prednisone 30mg/d initially
+ Pantoprazol 40mg/d
+ Calcium 500mg/d
+ Vitamine D3

Therapy of latent TBC:

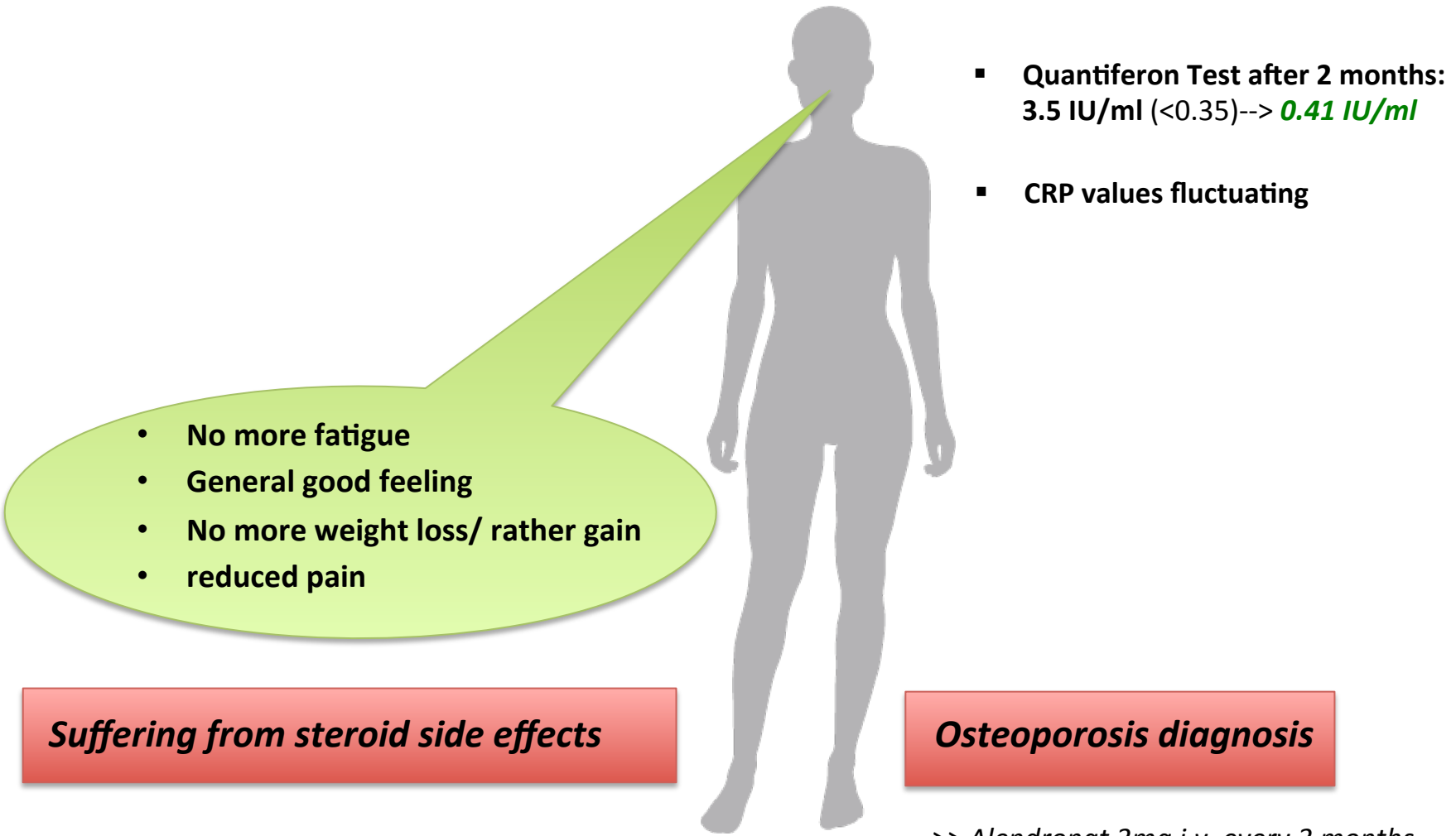
Isoniazid 300mg/d for 9 months
+ Vitamine B6

Check for Peripheral neuropathy!

Other Treatment Options:

- **Adalimumab** s.c.
(TNF alpha blocker)
- Azathioprine
- ...

5. The Development of the Case

- 
- No more fatigue
 - General good feeling
 - No more weight loss/ rather gain
 - reduced pain

Suffering from steroid side effects

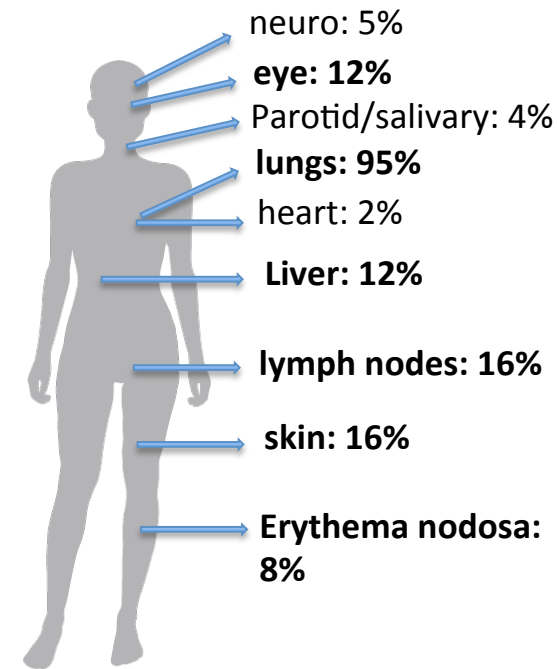
Osteoporosis diagnosis

- Quantiferon Test after 2 months:
3.5 IU/ml (<0.35)--> **0.41 IU/ml**
- CRP values fluctuating

-> Alendronat 3mg i.v. every 3 months

7. Main Learning Points: Sarcoidosis

- Prevalence: **10-20 /100.000**; more common in blacks
- Etiology: unknown
- Common symptoms:
 - Cough, dyspnea, chest pain, **Fatigue, malaise, fever, weight loss**
 - **Joint pain/swelling, dry mouth/eyes, muscle weakness...**
- Basic tests:
 - **Full physical exam**, chest X-ray, ECG, pulmonary tests, ophthalmological exam
- Laboratory testing: no specific test available
 - Can be helpful: CRP, erythrocyte sedimentation rate, ACE level, 1,25-dihydroxyvitamin D deficiency,...
 - Exclude: HIV, Hepatitis, Lues, tuberculosis, CVID,...
 - may be seen in these patients: hypercalcurie, leukopenia, eosinophilia,...



▪ Diagnostic criteria:

(1) clinical/ radiographic manifestations (2) exclusion of other similar diseases (3) noncaseating granulomas



**Thank you
for your
attention.**

Sara.Ersoezlue@usz.ch