

**4<sup>th</sup>** International  
Symposium on  
Psychiatry  
**HIV** Psiquiatria **VIH**

A stylized red ribbon graphic that starts as a thick horizontal bar, loops upwards and to the right, then curves back down and to the left, ending in a thin tail. It overlaps the text 'Psychiatry' and 'HIV'.

Barcelona, May 5<sup>th</sup> and 6<sup>th</sup> 2011

# Clinical Cases

**4th Simposium International on HIV Psiquiatria,  
Barcelona, 5.-6th of May 2011**

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# Case 1

## 64y old patient: Hans

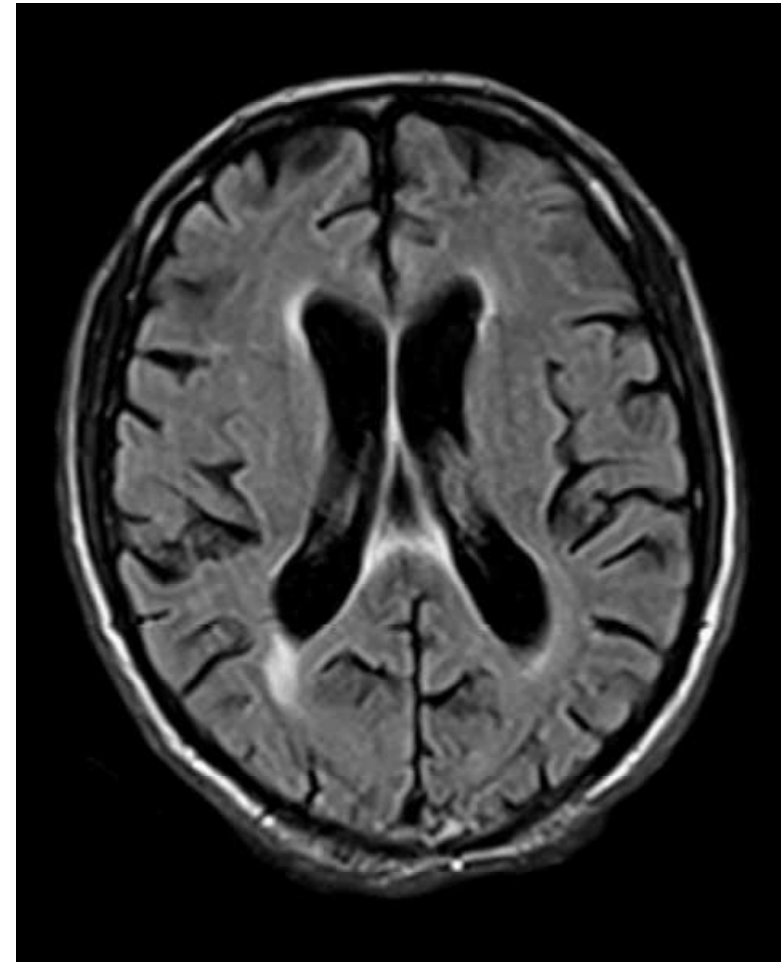
- In April 2008 Patient is found in the train by the train conductor who found the patient to be severely disoriented
- Train conductor calls the ambulance and the patient is admitted to a local hospital
- General exam: patient in reduced general condition but normal state of nutrition; body weight 65kg, height 170cm , temp. 37.0°C, physical exam normal
- Neurological exam upon admission: no abnormalities
- Psychiatric exam: disoriented to time, place and person. Affect and drive are disturbed . Critical faculties reduced. Concentration and readiness reduced.
- EEG: 8/sec. Alpha EEG in low voltage level; no focal signs, no signs of epileptiform activity
- Cerebrospinal fluid results: cell count 2/3, glucose 46mg/dl (normal range 40-75), CSF protein 46mg/dl

# Imaging

**CT**



**MRI**



# Question ?

» **What would be your further work-up ?**

» **Which additional diagnostic tests do you recommend ?**

## Further results

- » **HIV-1-ELISA and Westernblot positive**
- » **HIV-RNA: 6.800.000 copies/ml**
- » **CD4-count: 25/ $\mu$ l (4%)**
- » **TPHA in serum 1:80**
- » **FTA-Abs-IgG-Test: positive**
- » **19-S-IgM-FTA-Test: borderline**
- » **VDRL: negative**

# Question ?

- » **What to do next ?**
- » **What is your diagnosis?**
- » **Which treatment do you recommend?**



## Diagnostic classification of HIV-associated neurocognitive disorders (HAND)

<b>HIV-associated asymptomatic neurocognitive impairment (ANI)</b>	<ul style="list-style-type: none"><li>• Impairment in <math>\geq 2</math> neurocognitive domains (attention; executive memory; speed of information processing, etc.) with <math>\geq 1</math> SD below the mean</li><li>• The cognitive impairment does not interfere with daily functioning</li></ul>
<b>HIV-associated mild neurocognitive disorder (MND)</b>	<ul style="list-style-type: none"><li>• Similar to ANI, but with mild–moderate interference w/daily functioning</li></ul>
<b>HIV-1-associated dementia (HAD)</b>	<ul style="list-style-type: none"><li>• Impairment in <math>\geq 2</math> neurocognitive domain with <math>\geq 2</math> SD below the mean</li><li>• Marked interference with daily functioning</li></ul>

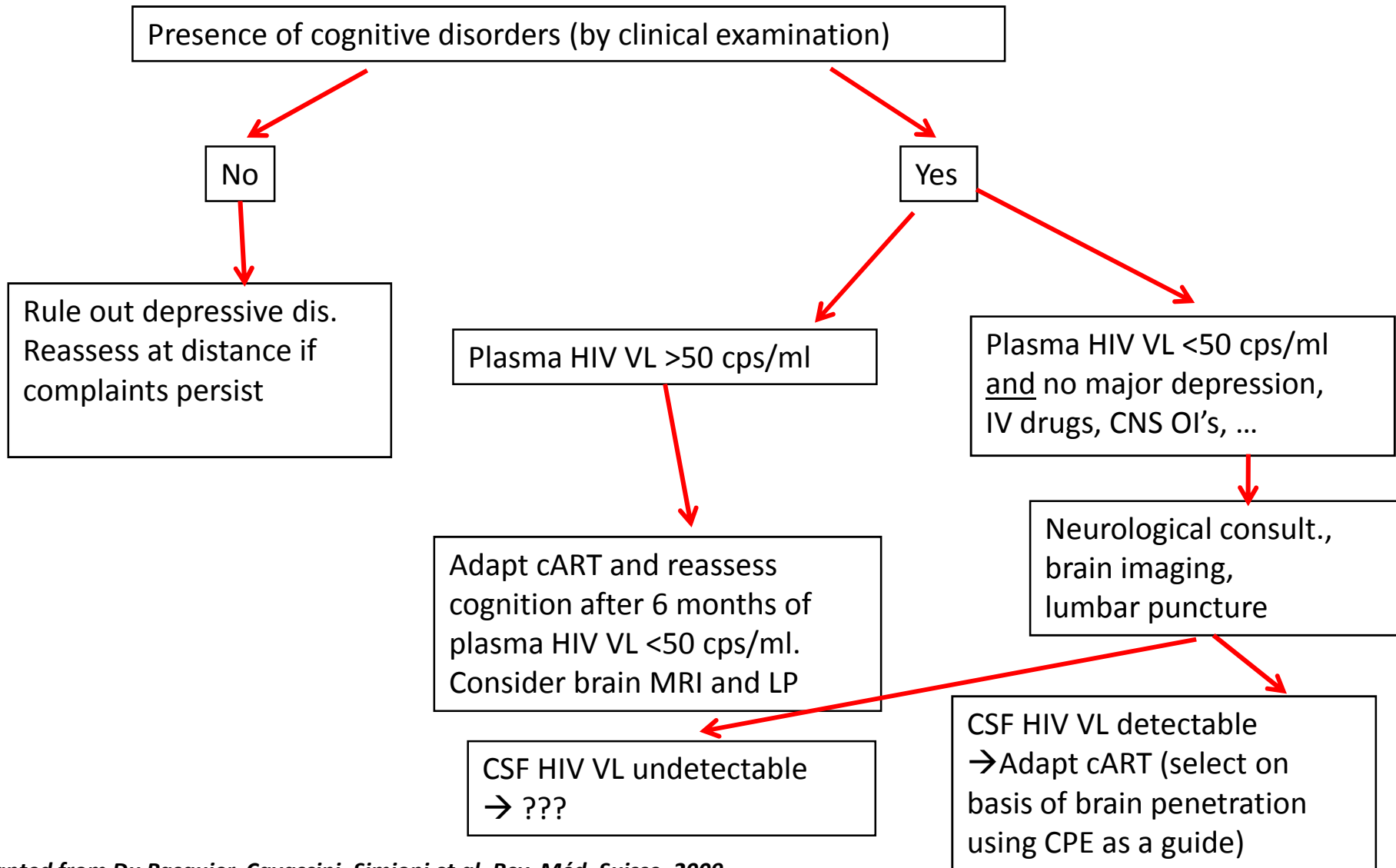
## Clinical course

- » Patient is treated with Ceftriaxon 2g daily i.v. under the suspicion of a Neurosyphilis
- » Do you agree with this diagnosis and treatment?
- » HIV treatment is started with Truvada 1-0-0 and Kaletra 2-0-2
- » Do you agree with this treatment choice?

# CPE score

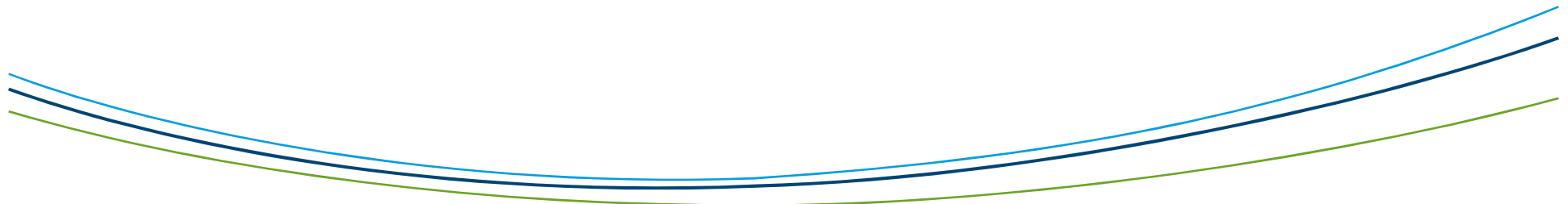
	4	3	2	1
<b>NRTIs</b>	Zidovudine	Abacavir Emtricitabine	Didanosine Lamivudine Stavudine	Tenofovir Zalcitabine
<b>NNRTIs</b>	Nevirapine	Delavirdine Efavirenz	Etravirine	
<b>PIs</b>	Indinavir-r	Darunavir-r Fosamprenavir-r Indinavir Lopinavir-r	Atazanavir Atazanavir-r Fosamprenavir	Nelfinavir Ritonavir Saquinavir Saquinavir-r Tipranavir-r
<b>Entry/Fusion Inhibitors</b>		Maraviroc		Enfuvirtide
<b>Integrase Inhibitors</b>		Raltegravir		

# Proposed algorithm for HIV+ patient complaining of cognitive impairment



## Clinical course

- » **HIV-RNA 3 months after starting ART: 386 copies and then 2 months later persistingly < 40 copies/ml**
- » **CD4-count: 3 mths after starting ART 16% 242/ $\mu$ l**
- » **Significant neurological and psychiatric improvement; patient works in old job again**



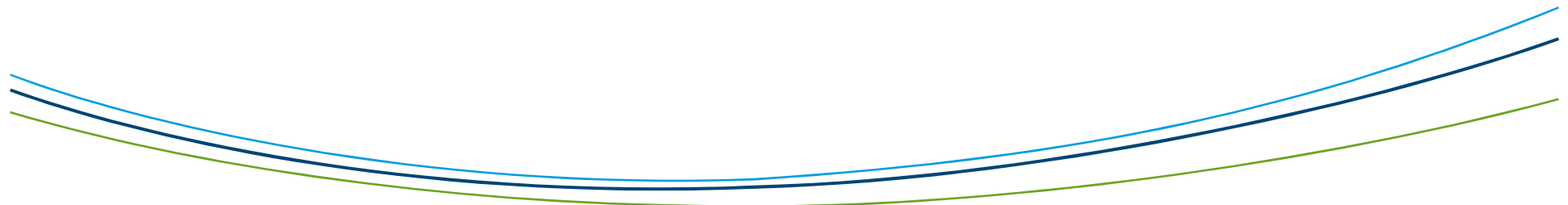
# Case 2

## 60y old patient: Klaus

- In March 2011 patient develops a strong feeling of cold in the extremities, increasing dysesthesia especially in the finger tips and weakness in the legs
- Patient calls ambulance and is admitted to the Department of Neurology
- Patient has known HIV infection since 2010; patient is enrolled in the START study in the no ART arm, CD4-count in 12/2010 326/ $\mu$ l (30%), HIV-RNA 7652 copis/ml
- Neurological examination upon admission: Muscle reflexes of upper and lower extremities not present; Babinski negative, moderate paresis of the legs and arms, peresthesia all extremities
- Psychiatric and neuropsychological examination: no pathological findings
- CSF findings: no cells, glucose 77mg/dl + (normal range 40-75), protein 840,9 mg/l ++ (normal range -500mg/l)

## 60y old patient: Klaus

- CSF findings continued: albumino-cytological dissociation
- Brain imaging (CT scan) no pathological finding
- Clinical chemistry: ALT 118 U/l, AST 74 U/l,  $\gamma$ -GT 652 U/l, CK 66 U/l, Creatinine 0,6 mg/dl, Hb 13,0 g/dl, platelets 139.000/ $\mu$ l, Leucocytes 3.65 G/l





# Question ?

- » **What to do next ?**
- » **What is your diagnosis?**
- » **What is your main differential diagnosis?**
- » **Which treatment do you recommend?**

## Clinical course

### »Primary Diagnosis: Guillain-Barre Syndrom

### »Diagnostic criteria:

**Required:** ★ Progressive, relatively symmetrical weakness of two or more limbs due to neuropathy

★ Areflexia

★ Disorder course < 4 weeks

★ Exclusion of other causes

**Supportive:** ★ relatively symmetric weakness accompanied by numbness or tingling

★ mild sensory involvement

★ facial nerve or other cranial nerve involvement

★ absence of fever

★ typical CSF findings

★ electrophysiologic evidence of demyelination from EMG

## Differential diagnosis:

- » **Acute myelopathies**
- » **Botulism**
- » **Diphtheria**
- » **Lyme disease**
- » **Porphyria**
- » **Vasculitis neuropathy**
- » **Poliomyelitis**
- » **CMV polyradiculitis**
- » **Critical illness neuropathy**
- » **Myasthenia gravis**
- » **Poisonings**
- » **West Nile virus disease**
- » .....  
.....

## Clinical course

### » Secondary diagnosis: Syphilis infection

**Syphilis serology serum:** TPPA: 1:327680 Titer  
IgG-Immunoblot: positive  
IgM-Immunoblot: positive  
VDRL: 1:256 Titer

**Cerebrospinal fluid:** Serum-CSF Quotient: 0,5  
TPPA: 1:1024  
IgG-Immunoblot positive  
VDRL: negative

## Clinical course

- » **High-dose intravenous immunoglobulins 36g/d**
- » **After increasing paresis and development of problems with swallowing and speaking plasmapheresis was also initiated**
- » **10 days later dramatic clinical improvement and the patient can be transferred to a rehabilitation facility**
- » **Penicillin treatment**
- » **ART: Kaletra 2-0-2 + Kivexa 1-0-0**

# Question ?

- » **Would you agree with the proposed treatment regimens?**
- » **What would have been your preferred HIV ART?**

# Case 3

## 34y old patient: Ralf

- Patient is a hemophiliac with known HIV infection since 1984; chronic HCV coinfection
- Patient is homosexual and has legal issues with his mother;
- HIV therapy since 2005 with Tenofovir, 3TC and efavirenz
- HIV-RNA <50 copies/ml
- CD4-count 566 cells/ $\mu$ l
- 2007 suicide attempt; patient is under psychotherapy
- 2008 Fibroscan reveals F3 fibrosis with 12.4 kilopascal



# Question ?

- » **Would you treat HCV ?**
- » **Can we keep the efavirenz treatment?**
- » **Is the previous suicide attempt a contraindication for interferon therapy?**
- » **Should we give antidepressants prior to HCV therapy?**