

**A patient with HIV/HCV co-infection on substitution methadone therapy and the history of alcohol and benzodiazepine abuse - a case of multifactorial neurological disorder.**

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# A case report

- Man, 65 years old ( born in 1950)
- HIV 1(+) – Western Blot test : 27.04.1989
- Comorbidities :
  - Chronic hepatitis C - not effective therapy with interferon and ribavirin 2005
- At the time of notification to the clinic in 2001  
Stage C3 CDC : CD4 - 52 cells, CD4 / CD8 - 0.14
  - Recurrent fungal infections of the gastrointestinal tract
  - Disseminated herpes zoster

# Interview

- The mode of infection HIV- psychoactive drugs used intravenously
- From 14 years old addiction of illegal drugs
  - glues,
  - solvents,
  - opiates - "compote", heroin,
  - benzodiazepines,
  - alcohol,
- From 16 years old started taking drugs intravenously
- From 17 years old under psychiatric care,
- 14 times detoxified in hospital words
- From 50 years old (2001) – substitution methadone therapy- the current methadone dose of 110 mg

# History of HIV treatment

| Date            | ARV                    | The reasons for treatment change |
|-----------------|------------------------|----------------------------------|
| 06.2001-05.2002 | AZT+3TC+ SQV+ RTV      | Lactic acidosis                  |
| 05.2002-07.2002 | SQV + RTV+ EFV         | CNS disorder after EFV           |
| 07.2002-01.2007 | SQV + LVP /r+ RTV      | simplification                   |
| 01.2007-04.2014 | SQV+ LPV/r             | Neurocognitive disorder          |
| 05.2014-08.2014 | AZT + 3TC + SQV +LPV/r | anemia                           |
| 08.2014-10.2014 | FTC+ TDF + SQV + LPV/r | simplification                   |
| 10.2014 – now   | FTC+ TDF + DRV/r       |                                  |

| Date    | CD4 cell/sul | CD4/CD8 | VL HIV copies/ml |
|---------|--------------|---------|------------------|
| 11.1998 | 294          | 0,30    |                  |
| 04.2001 | 52           | 0,14    | 65200            |
| 09.2001 | 136          | 0,16    | <50              |
| 04.2002 | 253          | 0,44    | 79               |
| 06.2003 | 432          | 0,30    | <50              |
| 06.2004 | 298          | 0,36    | <50              |
| 09.2005 | 267          | 0.40    | <50              |
| 06.2006 | 330          | 0,41    | <50              |
| 04.2007 | 403          | 0,39    | <50              |
| 05.2008 | 315          | 0,47    | 88               |
| 07.2009 | 502          | 0,52    | <40              |
| 04.2010 | 361          | 0,58    | <40              |
| 09.2011 | 424          | 0,58    | 42               |
| 07.2012 | 465          | 0,60    | <40              |
| 07.2013 | 397          | 0,54    | <40              |
| 04.2014 | 482          | 0.61    | 247              |

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**The patient reported:** dizziness, memory impairment, difficulty in performing daily activities

**The physical examination:** devastated, weight loss 10 kg in 2 months without dieting, muscle atrophy and reduced lower limb strength

**MR CNS:** multiple, small, scattered and confluent foci of increased signal intensity on T2-dependent and sequence Flare located in the subcortical white matter and paraventricular in the frontal, temporal and parietal lesser extent, the two hemispheres of the brain. Spilled changes in the temporal lobes and deep structures on both sides. After intravenous administration of contrast agent fireplace strengthening the 3-4 mm located in the convexity of the frontal lobe and right hemisphere 8x5 mm bonfire in the middle of the right parietal lobe. Ambiguous picture - inflammation, infectious accompanied by edema and slight modifications of the damaged blood-brain barrier

**Doppler ultrasound of carotid and vertebral arteries** - without perceptible hemodynamically significant stenoses

## Lumbar puncture:

Cytosis 8 cells , 100% lymphocytes

Protein 0,88g/l (0.12-0,6)

Glucose 2,66 mmol/l (2,20-4,40)

Chloride 119 mmol/l (115-129)

Lactic acid 1,27 mmol/l (1,13-3,23)

HSV IgM, IgG negative

Toxo IgM, IgG negative

CMV IgM, IgG negative

EBV IgM, IgG negative

Ag Cryptococcus negative

RNA HIV 2448 copies/ml  
(serum 60 copies/ml)

genotyping- no mutations

# Specialist consultations

**Psychiatric consultation** - depressive episode F32 according to ICD -10, organic personality disorders, received fluoxetine 10 mg / d, mianserini 10mg / night

**Neurological consultation** - psychomotor retardation, paralysis of the lower limbs of medium, organic CNS damage

**Psychological consultation** - impaired memory and learning, lability attention and psychomotor skills - an advanced and progressive stage of MND - F04.2 according to ICD -10.

# Summary

- Multifactorial pathomechanism of CNS disorders
- Wide diagnostics necessary
- Interdisciplinary care
- Lack of standards of care in such patients