

A challenging neurological complication in a young HIV-infected woman

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Assessment of Resources and Research Opportunities in HIV

ARROW 2015

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SSI, 26 year-old woman

- diagnosed with severe anemia in a Hematology department
- tested HIV positive

pale
mood disturbances

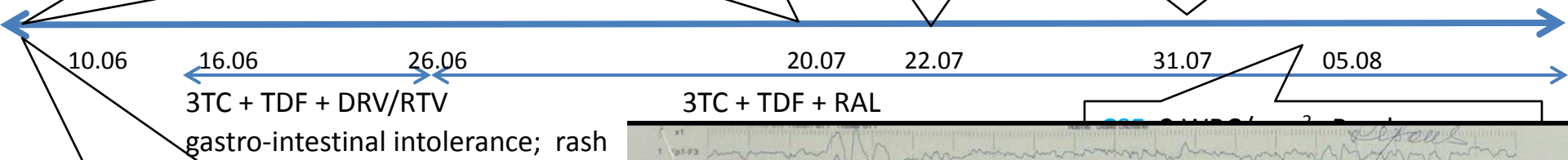
Hb 6.86 g/dl;
PL 79.400/mm³
CD4 cell count: 63/mm³ (4.6%)
VL: 1.808.674 copies/mL
(6.25log₁₀)

CD4 cell count: 192/mm³ (8.8%)
VL: 33 copies/mL (1.51 log₁₀)

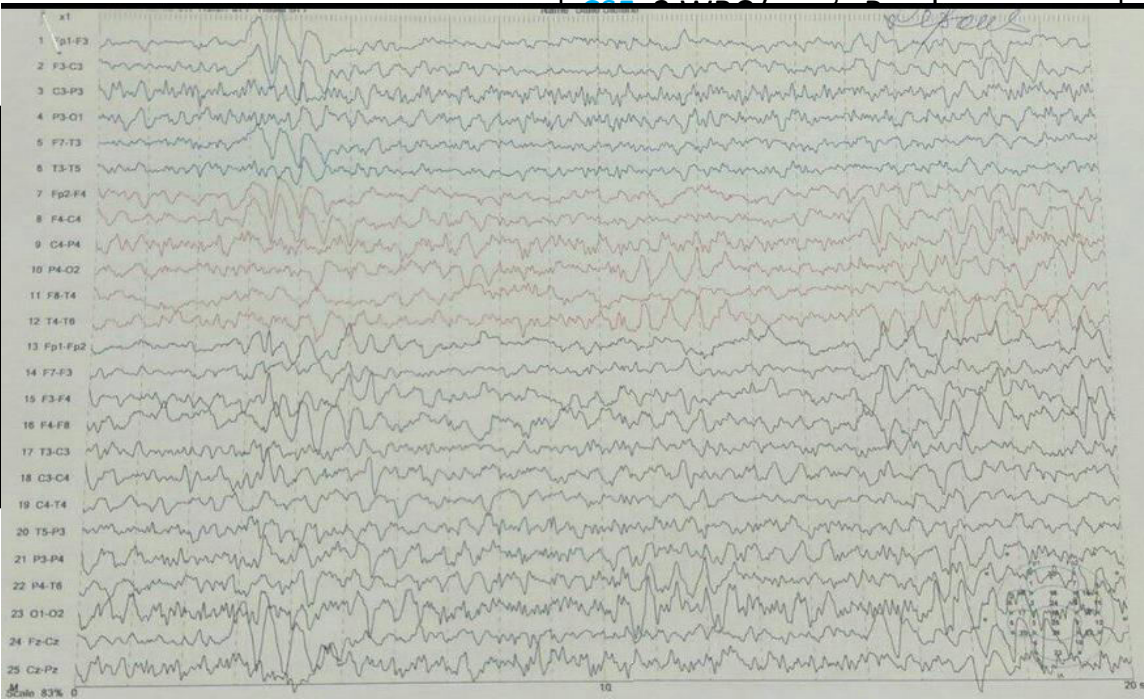
anxiety,
auditory
hallucinations
partial seizures;
movement
disturbances
weakness of the
right body ,
ataxia

Neurological exam
generalized seizures
right hemiparesis, with crural
predominance, dysmetria
positive right Babinski sign

right upper arm
paresthesia
right upper arm
and lower limb
palsy



serology	plasma	serology	plasma
anti HIV	pos	Toxo IgM	neg
anti HCV	neg	Toxo IgG	neg
HBs Ag	neg	CMV IgM	neg
syphilis	neg	CMV IgG	pos
		HSV Ig M	neg



Differential diagnosis

Focal lesions

1. Infectious (bacteria, viruses, parasites, fungi)

- Cerebral toxoplasmosis
- Tuberculoma/tuberculous abscess
- Cryptococcoma
- CMV encephalitis – focal form (rare 5%)

2. Cerebral tumors

- Cerebral lymphoma
- **Primary tumors:** glioma; astrocytoma, meningioma
- Cerebral metastasis

3. Others

- Neurosyphilis
- Cysticercosis
- Bacterial abscess - Nocardia
- Aspergilloma

Diffuse lesions

1. Viral encephalitis

- HSV
- VZV
- CMV
- HHV 6
- measles

2. HIV encephalopathy

- high HIV viral load in CSF
- neurologic deficits with moderate progression

3. Progressive multifocal leukoencephalopathy (PML)

- positive PCR-ADN JCV in CSF

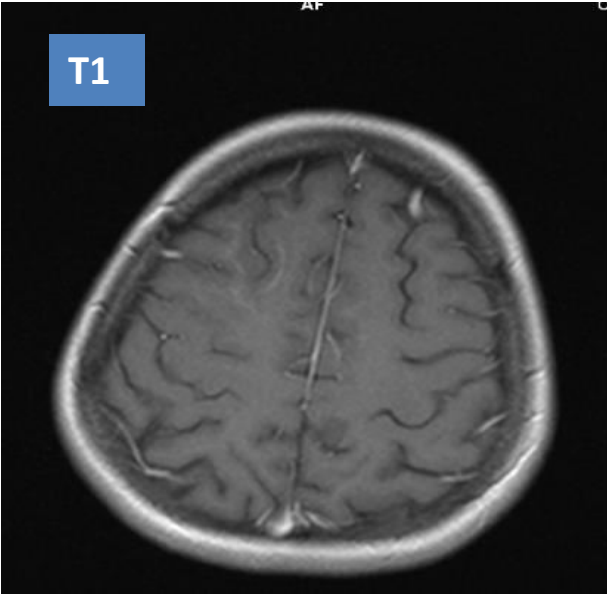
4. Immune Reconstitution Inflammatory Syndrome (IRIS) – PML

5. Diffuse bacterial/fungal meningitis

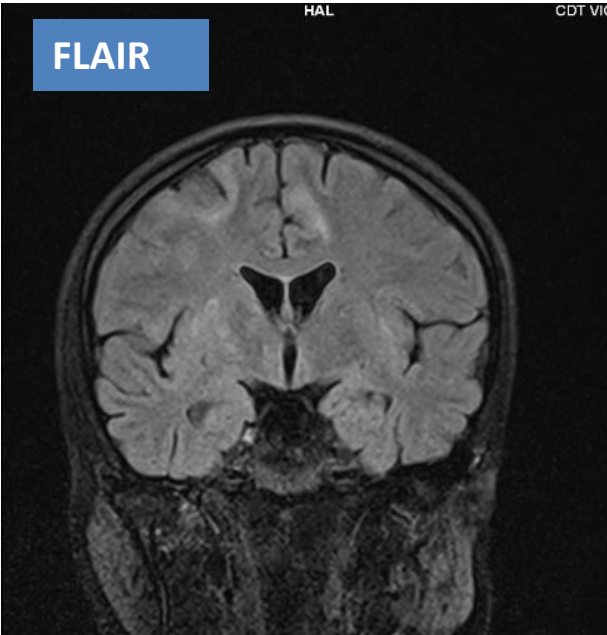
- Diffuse toxoplasmosis meningitis
- C. neoformans meningo-encephalitis
- TB meningo-encephalitis

MRI - 04.08.15

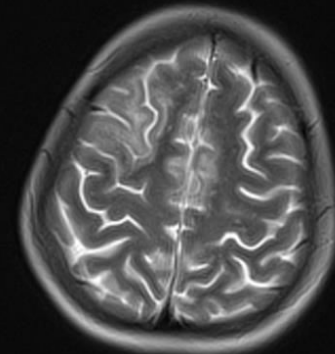
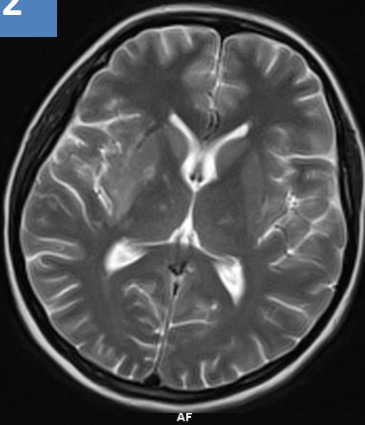
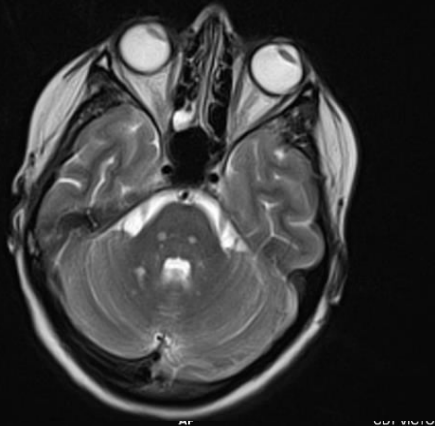
T1



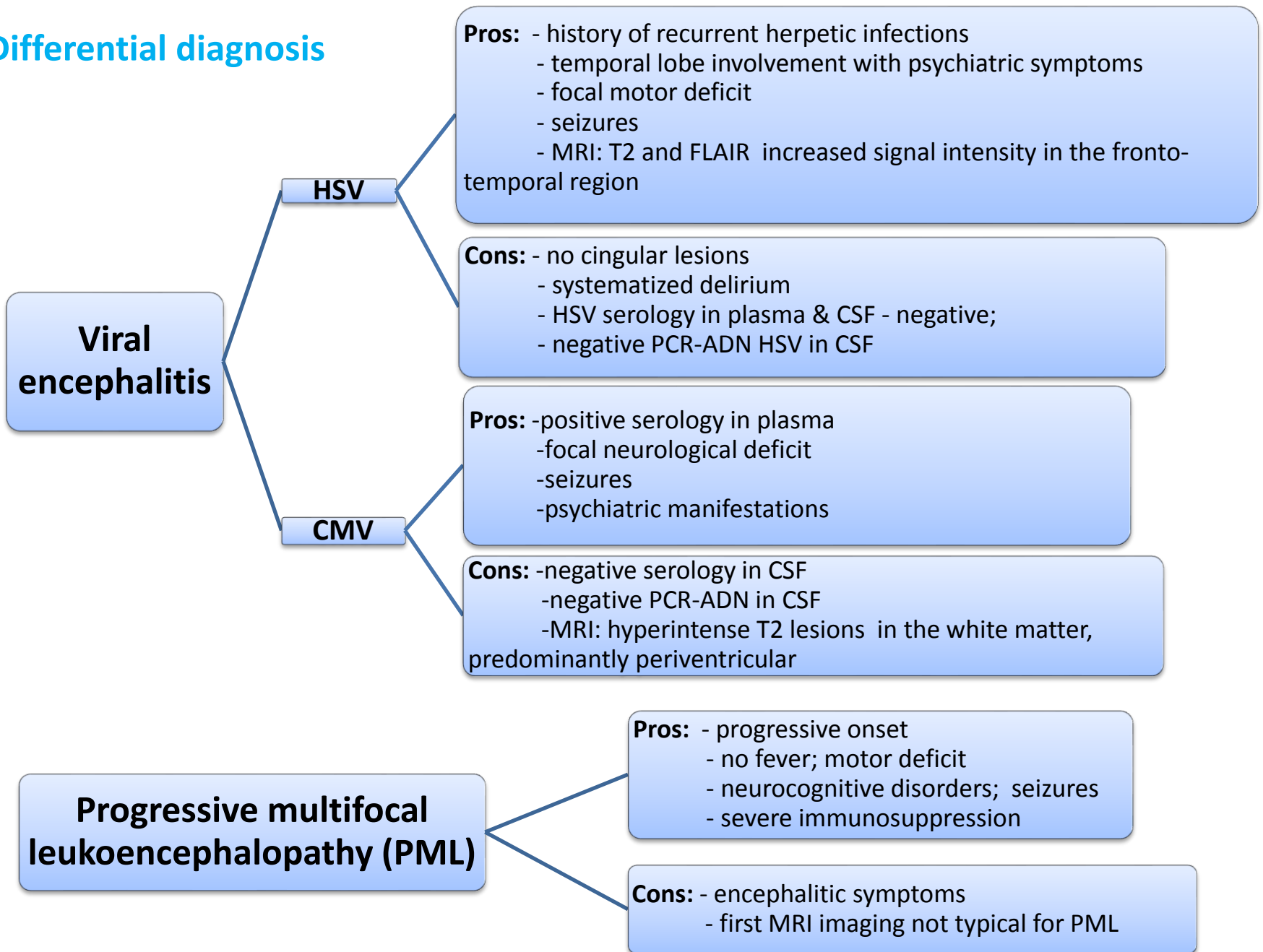
FLAIR



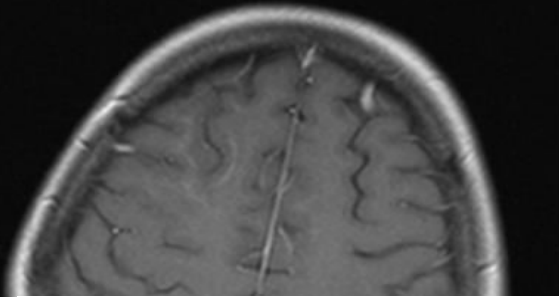
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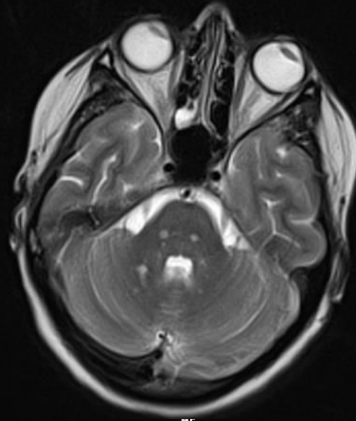
Differential diagnosis



T1



T2



Viral encephalitis?

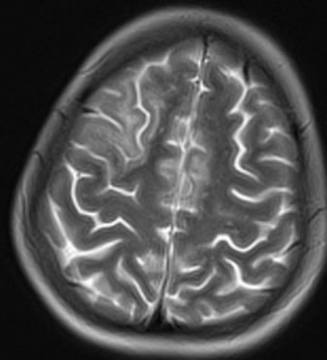
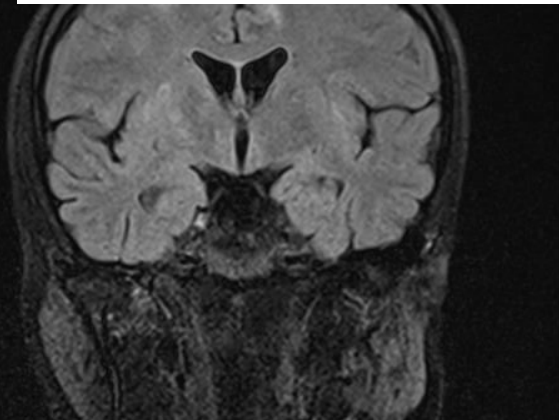
Treatment

- Acyclovir iv
- corticotherapy
- antiepileptic treatment: Valproate

14.08: CSF: PCR-ADN CMV negative
PCR-ADN HSV negative
PCR-ADN MTB negative
PCR-ADN JCV **positive**

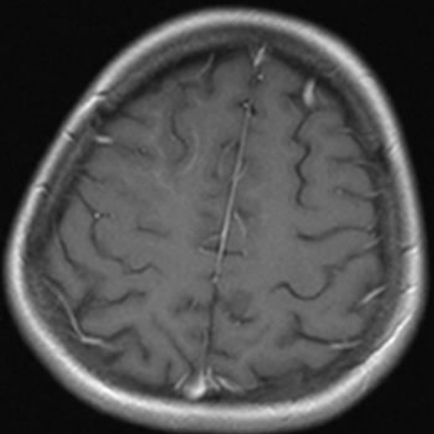
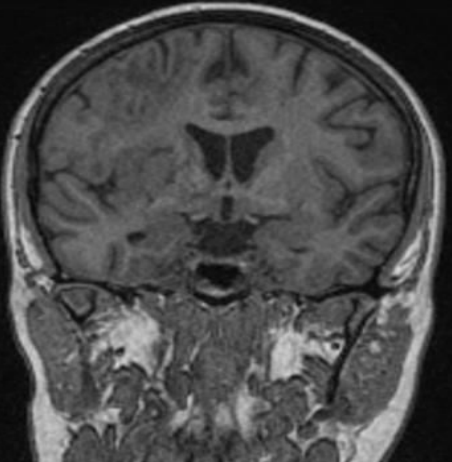
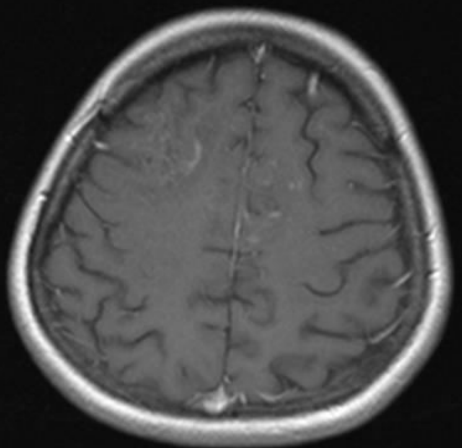
Evolution

- slightly improvement of the motor deficit
- important persistent psychiatric symptoms

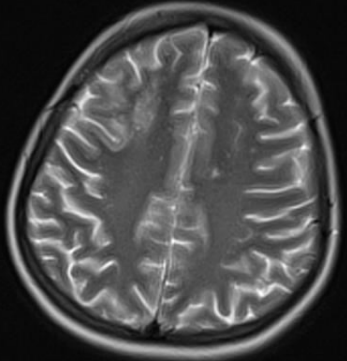
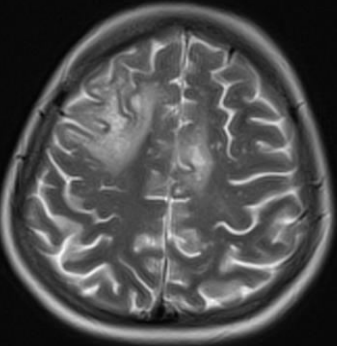
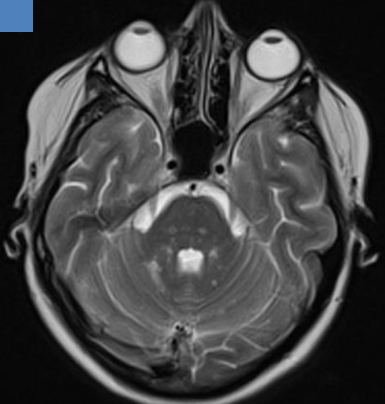


T1

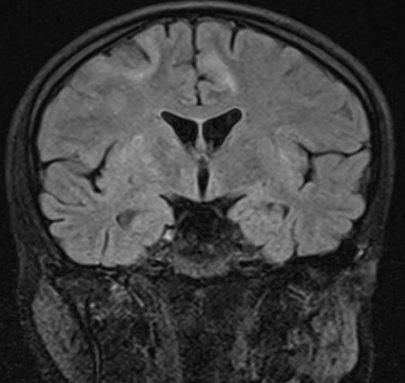
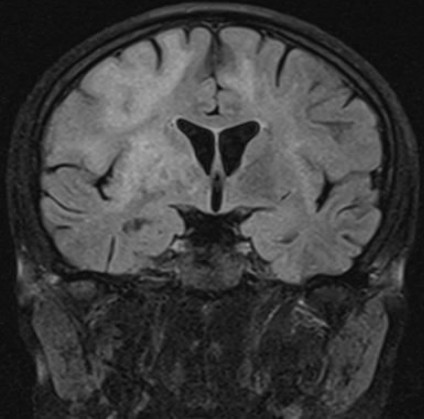
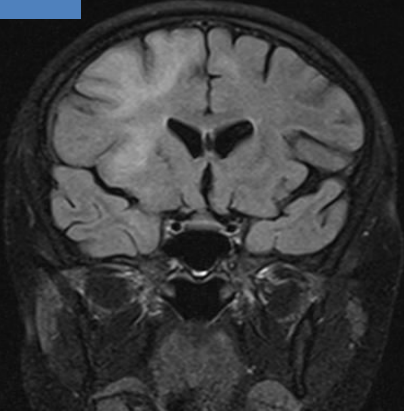
04.08



T2



FLAIR



MRI
03.09.15

Differential diagnosis

PML vs. IRIS – PML PCR-ADN JCV positive in CSF

Diagnosis: Unmasking IRIS – PML ?

Cons

PML
-progressive, insidious onset
-no fever

- encephalitic symptoms

Particularities

- atypical onset
- atypical MRI imaging
- concomitant psychiatric disorders (related or not to the neurological lesions?!)
**IRI:
PV**

- more rapid clinical course than classic PML
- significant response to corticosteroid therapy
- **MRI (second exam) - extension of the lesions predominantly in the white matter**
- **contrast enhancement**

Psychiatric associated disorders: Schizophrenia
Anxious syndrome
Depressive disorder



Assessment of Resources and Research
Opportunities in **NeuroAIDS**

Thank you!

