

Acute toxic leukoencephalopathy induced by presumed synthetic cannabinoid intoxication – a case report (EPO-519)

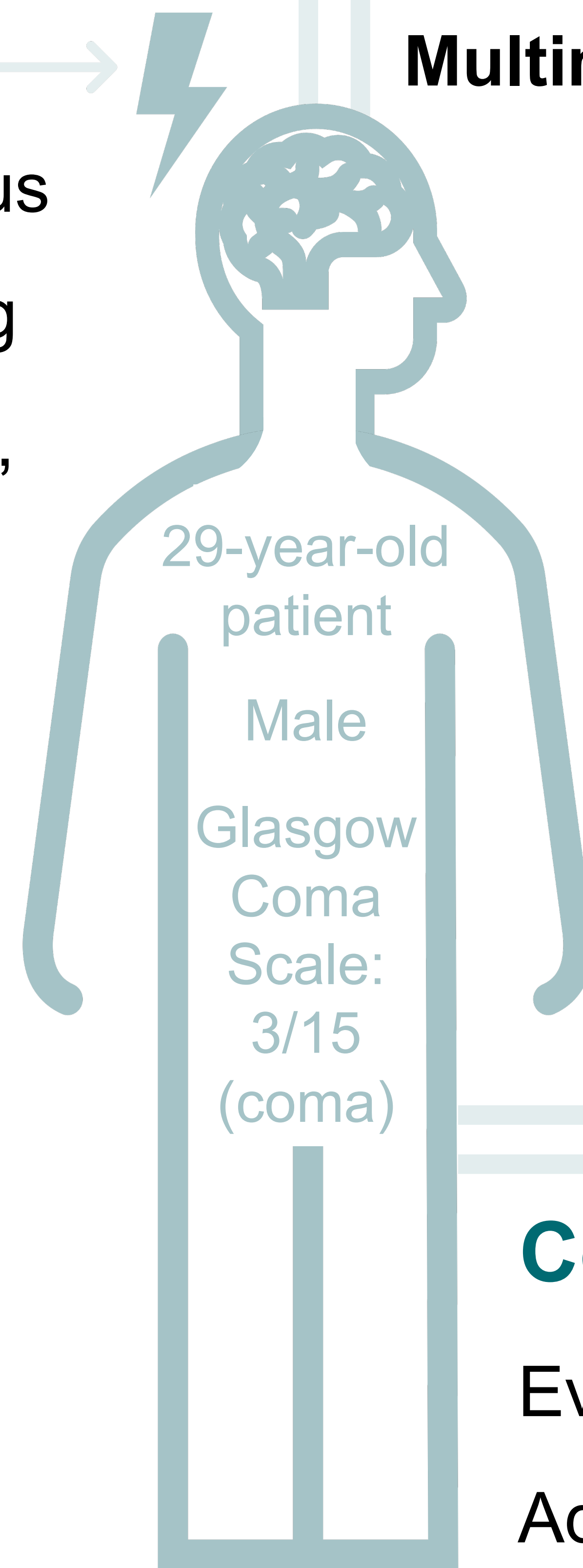
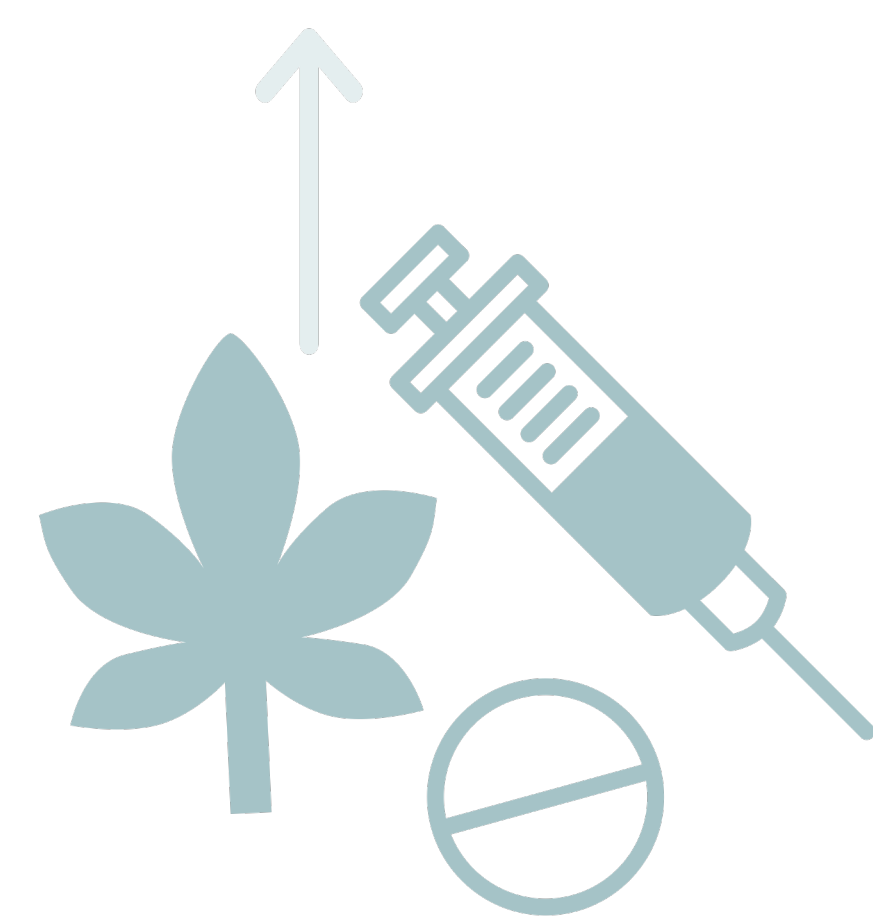
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Background

Leukoencephalopathy

category of central nervous system disorders affecting the white matter structure, potentially induced by exposure to exogenous neurotoxins such as (synthetic) drugs [1,2].



29-year-old patient
Male
Glasgow Coma Scale: 3/15 (coma)

Methods

Multimodal assessments

- Structural magnetic resonance imaging (sMRI)
- Fluorodeoxyglucose positron emission tomography (FDG-PET)
- Coma Recovery Scale-Revised (CRS-R)

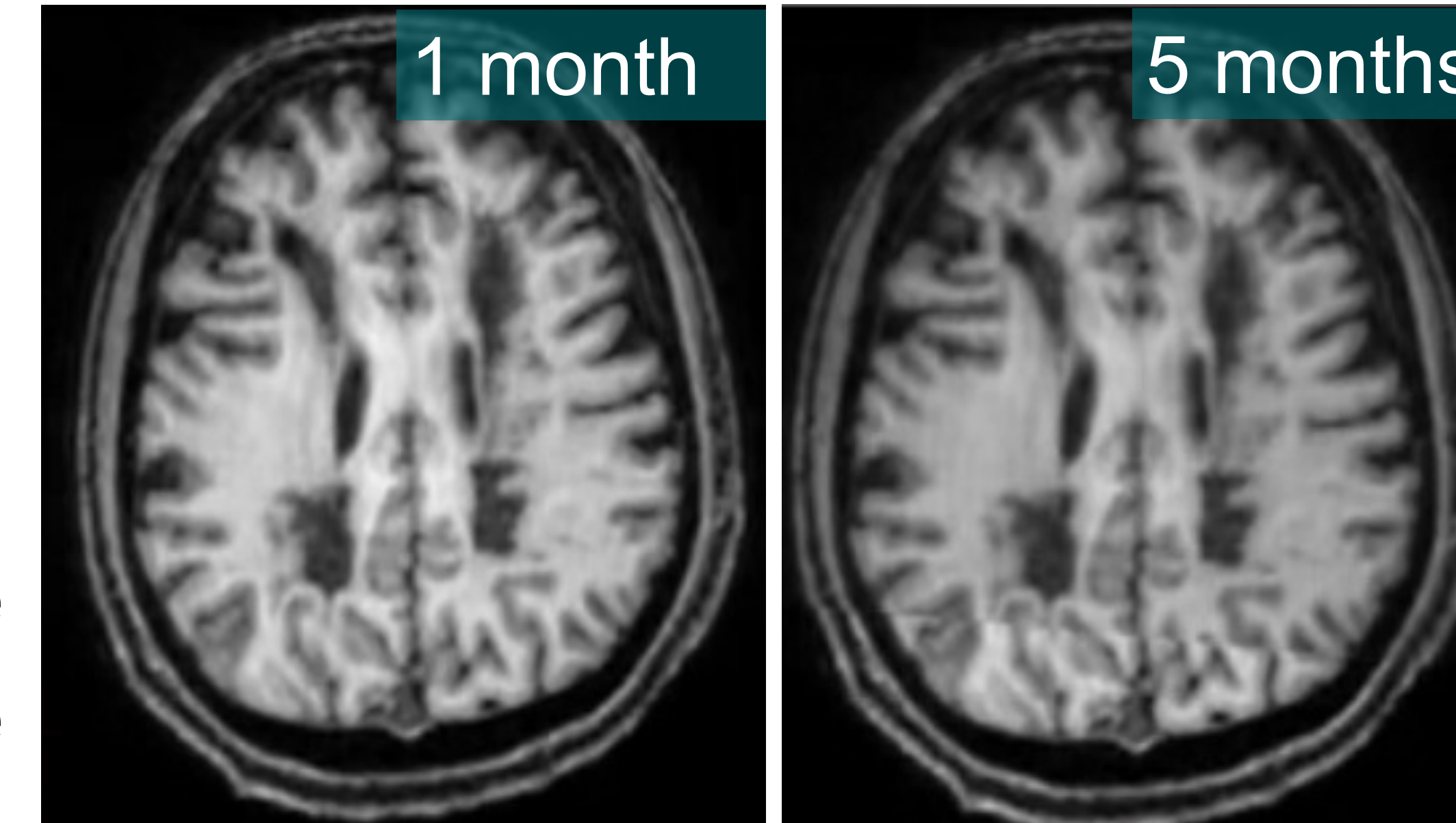
Conclusion

Evidence of **atypical and delayed neurological recovery** after acute toxic leukoencephalopathy.
Added value of **functional neuroimaging** in diagnosis and prognosis.

Results

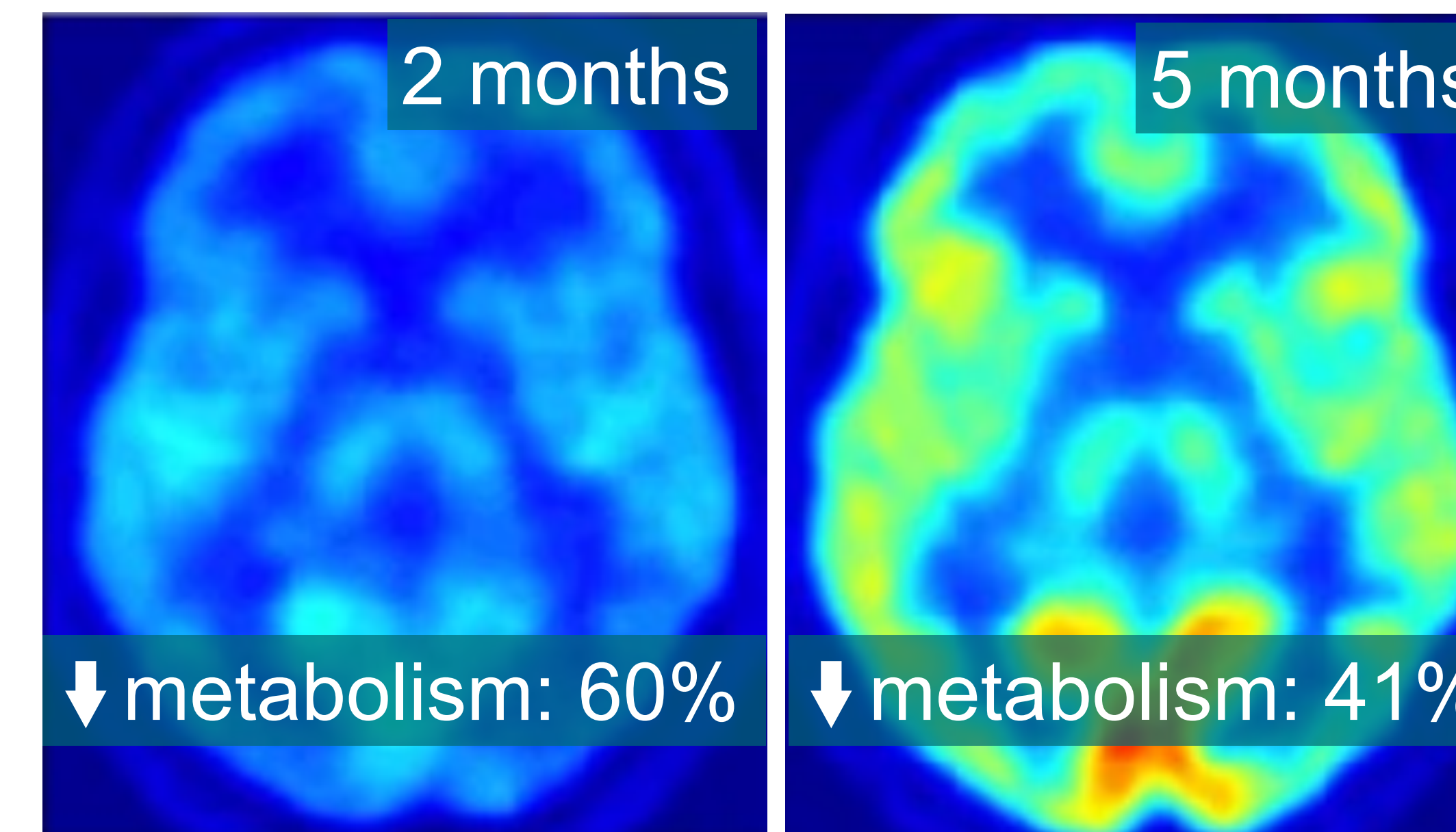
sMRI

Persistent structural white matter damage



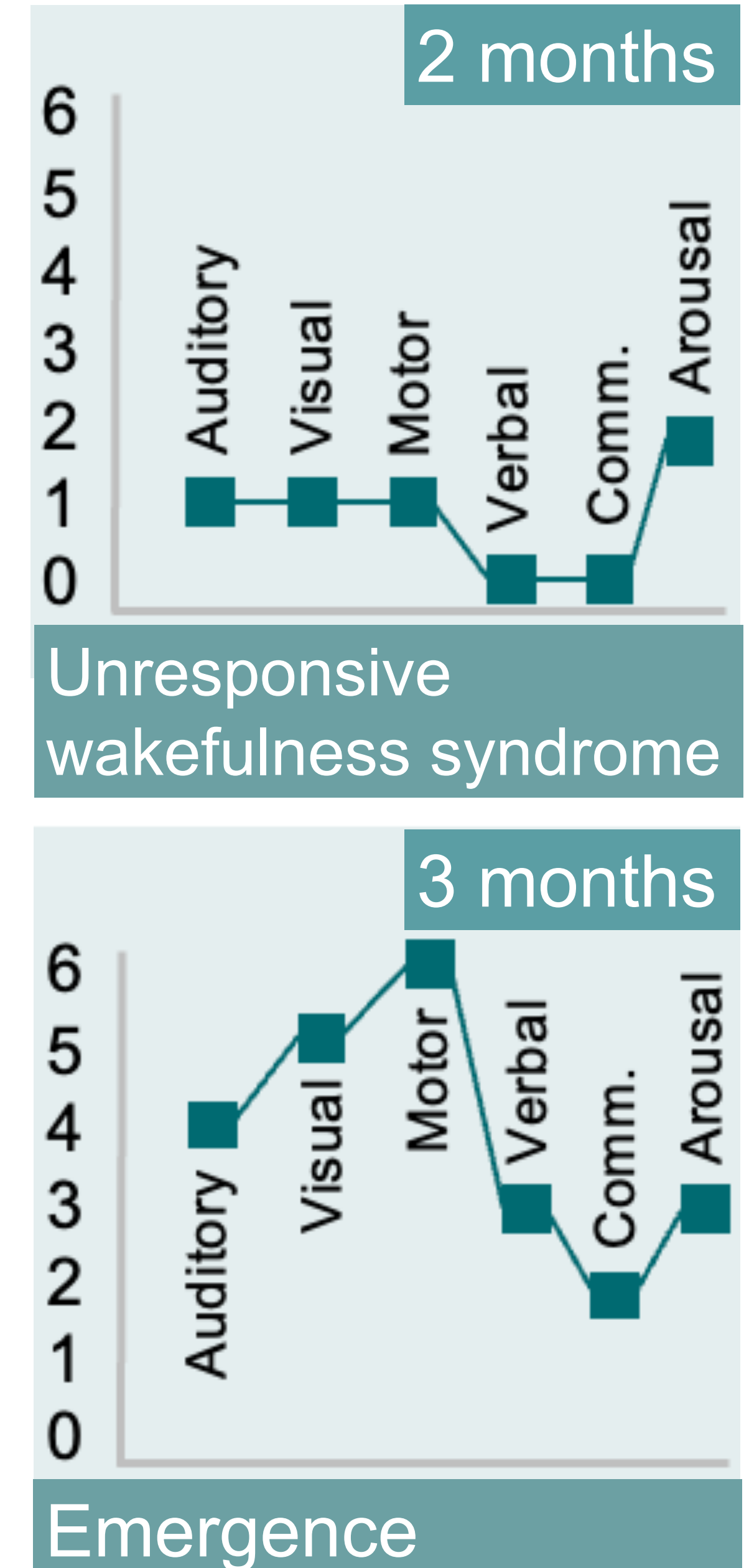
FDG-PET

Global cortical metabolism restoration



CRS-R

Progressive behavioral recovery (from initial coma state)



The authors have no potential conflict of interest to disclose. **References:** [1] Patterson et al. Encyclopedia of the Neurological Sciences. 2014, [2] Filley & Kleinschmidt-DeMasters. New England Journal of Medicine. 2001.