Short and long duration space flights may provide hints related to etiology of VIIP. Changes in CBF and CSF flow dynamics larger than normal physiological fluctuations were observed in the long-duration crewmembers. Changes in CSF flow were more pronounced than changes in CBF. Decreased CSF flow dynamics were observed in a subject with VIIP signs. Study limitations include a slightly longer landing-to-MRI scan period for the short-duration cohort and limited sensitivity of the subjective discrete ordinal CPG scale. This limitation can be overcome by using imaging based parametric measures of VIIP severity such as globe deformation measures.

References and Acknowledgements