Eye-tracking technology: a tool to enhance understanding of memory complaints in COVID-19 survivors

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Dear Editor,

We read with great interest the recent article by Cerioli et al.,[1] titled "Post-COVID condition: a focus on psychiatric symptoms and diagnoses in patients with cognitive complaints," published in *CNS Spectrums.* This study offers valuable insights into the neuropsychiatric sequelae of COVID-19, particularly the intersection of cognitive complaints and psychiatric diagnoses. While the study effectively highlights the importance of psychiatric screening, we believe additional perspectives could enhance the understanding and management of post-COVID condition.

Our team has extensively explored the use of, eye-tracking technology to detect subtle cognitive impairments across diverse populations,[2–5] with a particular focus on individuals affected by post-COVID condition.[4,5] In patients with post-COVID condition, we identified distinct oculomotor patterns, such as impaired saccadic control,[4,5] which suggest frontal-subcortical dysfunction. These findings align closely with those of Cerioli et al.,[1] who emphasized the need for comprehensive neuropsychiatric assessments. Incorporating eye tracking into future research could provide objective biomarkers to differentiate primary cognitive impairments from deficits driven by psychiatric conditions.

We also concur with Cerioli et al.,[1] on the importance of multidisciplinary care, particularly in addressing the stigma associated with psychiatric evaluations. Integrating cognitive assessments with noninvasive technologies like eye tracking may enhance patient engagement and foster a more holistic approach to managing post-COVID cognitive and emotional sequelae.

Additionally, the findings by Cerioli et al.,[1] on the relationship between untreated psychiatric illness and poorer clinical outcomes resonate with our own clinical observations. Our research underscores the value of early identification and intervention, with objective tools like oculomotor metrics serving as critical complements to traditional psychometric scales. These measures enhance diagnostic precision and support the monitoring of treatment response and recovery.

We commend the authors for their comprehensive work and advocate for incorporating advanced methodologies, such as eye tracking and other neurocognitive tools, into future research. Such integration could significantly refine the diagnostic and therapeutic strategies for patients with post-COVID cognitive and psychiatric sequelae, ultimately improving outcomes for this population.

Competing interest. The authors declare that there are no conflicts of interest relevant to this work.

Ethical standard. We confirm that we have read the journal's position on issues involved in ethical publication and affirm that this work is consistent with those guidelines.

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