

# IPCRG practice driven answers on COVID-19 and respiratory questions



## What is the duration/prognosis of brain fog in individuals with post-COVID syndrome?

### What the research says

Brain fog is one of the most common persistent symptoms among individuals with post-COVID syndrome (PCS; Junior et al 2022, Premraj et al 2022). While not a diagnostic term, patients describe a constellation of symptoms including poor concentration, confusion, slowed or fuzzy thinking, forgetfulness, lost words and mental fatigue (Jennings et al 2022; Venkataramani and Winkler 2022).

The clinical evolution of PCS-associated brain fog is variable and may emerge during the acute illness or after the acute symptoms have resolved and may resolve and relapse in the weeks and months following the acute illness (WHO 2022). While the cause remains unclear, early stage research suggests neuroinflammation in response to a viral infection may be involved (Venkataramani and Winkler 2022). The risk for the emergence of cognitive impairment following an acute COVID-19 illness remains elevated for at least 2 years following the acute illness (Taquet et al 2022). Patients with PCS may continue to experience symptoms of brain fog for more than 1 year after their acute illness (Ali et al 2022; Cristillo et al 2022). Depression has been shown as a strong predictor of persistent brain fog (Cristillo et al 2022). Early data suggests that female gender, greater neuropsychiatric symptoms, sleep disorders

and rumination/indecision may be associated with worse cognitive impairment (Donata Orfei et al 2022; Sadat Mirfazeli et al 2022).

Patients with PCS require holistic rehabilitation depending on the specific constellation of ongoing symptoms they are experiencing (Greenhalgh et al 2022). There are currently no recommended treatments for cognitive impairment/brain fog in people with PCS; management is largely supportive (Jennings et al 2022). A range of activities are suggested to supporting cognition and memory including regular aerobic exercise, participation in social and cognitively stimulating activities, practicing mindfulness, eating a healthy Mediterranean-style diet (including olive oil, fruits and vegetables, nuts, beans and whole grains), avoiding alcohol and drugs (including tobacco) and maintaining a good sleep routine (Budson 2022). Other strategies such as pacing, energy conservation, use of a daily to-do list may help with day to day coping (Greenhalgh et al 2022). Pharmacotherapy for sleep disturbance may be considered for patients reporting non-restorative sleep. Stimulants have also been suggested for the treatment of cognitive impairment/brain fog in patients with fibromyalgia, chronic fatigue syndrome or cancer-related fatigue. The efficacy of these agents for COVID-19-associated cognitive impairment/brain fog has not yet been systematically evaluated.

## What this means for your clinical practice

- Continue to follow-up and support our patients once they recover from acute COVID-19 illness of any severity, with vigilance for symptoms of cognitive impairment
- Encourage patients to undertake self-care including pacing and energy conservation, regular aerobic exercise, participation in social and cognitively stimulating activities, practicing mindfulness, eating a healthy Mediterranean-style diet, avoiding alcohol and drugs (including tobacco), and maintaining a good sleep routine
- Evaluate for and manage psychological issues including depression and/or anxiety
- Consider appropriate assessment and/or referrals for persistent or emergent neurological symptoms

## Refer to existing Sentinel responses on long-COVID:

- [How do we define long-COVID-19 disease/post-COVID syndrome?](#)
- [What are the risk factors for long-COVID-19 disease/post-COVID syndrome \(PCS\)?](#)
- [After serious pathology has been excluded, how do we manage common post-COVID symptoms?](#)
- [How do we manage post-COVID respiratory symptoms?](#)
- [How long will prolonged cough, tiredness and shortness of breath last in long-COVID/post-COVID syndrome patients?](#)

## Authors

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## Useful links and supporting references

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