COVID-19 in patients taking disease-modifying therapy for the management of multiple sclerosis

To date (February 25, 2021), limited information regarding COVID-19 in patients with multiple sclerosis (MS) taking disease modifying therapy (DMT) has been published. The results of the Covisep registry of France (n=347) suggest that use of DMT was not associated with increased severity of COVID-19, overall.[1] However, a larger registry in Italy with more statistical power (n=844) was able to detect that anti-CD20 therapy (ocrelizumab, rituximab) and recent corticosteroid exposure (<30 days) were both associated with an increased risk of severe COVID-19 infection.[2]

In the meantime, patients should **not** stop taking DMT without the consultation of their MS health-care provider.[3,4,5,6] Abrupt discontinuation of some DMTs (natalizumab and fingolimod) may result in potentially severe rebound disease activity. While it is generally recommended to continue DMT when patients develop a mild viral infection, MS health-care providers may consider **temporarily** stopping or delaying DMT in patients with worsening symptoms of viral infection, other risk factors (e.g., older age, comorbidities) and/or those taking more immunosuppressive DMT.[4]

Initiating treatment during the COVID-19 pandemic with DMT may be reconsidered or delayed, depending on patient risk factors, MS disease activity and the immunosuppressive risk of the drug.[4,5,6] DMTs with a higher risk of immunosuppression include immune cell-depleting therapy (alemtuzumab, cladribine, ocrelizumab, mitoxantrone, rituximab) and, to a lesser extent, immunomodulators (dimethyl fumarate, fingolimod, teriflunomide). DMTs with a lower risk of immunosuppression include interferon-beta, glatiramer and natalizumab.

The COVID-19 situation is evolving, and global data collection is ongoing. The evidence regarding the impact of COVID-19 on MS patients taking DMT will be reviewed as it becomes available and this statement will be updated accordingly.

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11 June 2020 to include reference 4
20 July 2020 to include reference 1
25 February 2021 to include reference 2

References

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4. Brownlee W, Bourdette D, Broadley S et al. Treating multiple sclerosis and neuromyelitis optica spectrum disorder during the COVID-19 pandemic. *Neurology* 2020;94(22):949-52.
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