THE CANADIAN NETWORK OF MS CLINICS (CNMSC) COVID-19 RECOMMENDATIONS

Preamble

The Canadian Network of MS Clinics (CNMSC) is dedicated to enhancing the quality of life of persons with MS. For updated information for Canadians living with MS, please visit the MS Society of Canada's 'COVID-19 Vaccine Guidance for People Living with MS' (link).

The CNMSC, our partners and the MS community have a shared responsibility in slowing the spread of the COVID-19 pandemic. Safe and effective vaccination will bring us closer to this goal.

Vaccines and safety in MS

To date, two vaccines against COVID-19 are approved in Canada (Pfizer-BioNTech and Moderna). These mRNA vaccines appear very effective in preventing COVID-19 infection in healthy subjects, although the duration of that protection remains speculative. The efficacy of these and other forthcoming vaccines in People with MS is hitherto unknown, especially for people with MS taking various disease modifying medications.

The safety of COVID-19 vaccination in people with MS is also unknown because persons with auto-immune disorders such as MS were mostly excluded from the two trials. At this time there is no empirical evidence or significant theoretical concerns to question the safety of mRNA vaccines in MS patients. There is also no convincing evidence that previous vaccines have either triggered MS or induced relapses and therefore no reason to believe that mRNA vaccines will be any different.

The CNMSC position is that full immunization should be considered for every person with MS (2 doses for COVID vaccines approved in Canada), especially those at greater risk of COVID-19 infection because of age, obesity, comorbidities, or ethnicity. This includes pregnant and breastfeeding women, to be discussed individually in weighing potential risks and benefits.

This statement is congruent with the recommendations of The National Advisory Committee on Immunization (NACI) which advises the Public Health Agency of Canada.

Side effects of the vaccines are common but mild to moderate and last hours to a few days. Fever occurs in up to 15% of individuals with the second dose and should be treated with antipyretics (acetaminophen preferred) to prevent accentuation of MS symptoms or pseudo-relapse. Serious adverse events from the two mRNA vaccines approved in Canada are likely to be quite rare. Health care providers are therefore strongly encouraged to promptly report to the manufacturer any serious event potentially related to the vaccines. The general sanitary protective measures issued by public health agencies across Canada must continue to be followed after vaccination, since it takes time for vaccines to generate protective immunity (link to Health Canada re: pandemic safety measures to be followed for members of the public).

Vaccines and MS treatment

Vaccination should not interfere in a major way with the most appropriate MS treatment plan for that individual. Scheduling to theoretically time vaccination to coincide with maximal lymphocyte counts may not always be possible, and simply getting the vaccine, whenever it may be available, is probably more important.

In the absence of hard data, theoretical considerations and expert opinion concerning MS treatment and COVID-19 vaccines guide the following recommendations which are very similar from country to country. As new data is available to inform on safety of DMT and COVID and/or DMT and COVID vaccinations, we will update our recommendations.

Conventional injectable drugs (interferons and glatiramer acetate), first line oral therapy (teriflunomide [Aubagio] and dimethyl fumarate* [Tecfidera]) and natalizumab [Tysabri] have not reduced the immune responses to conventional vaccines to any significant degree. These drugs are not expected to reduce the immune response to the current vaccines against COVID-19. Therefore, no dosing modification is recommended for vaccination. If the vaccine is administered before the start of treatment, no delay is required. (*Most patients taking dimethyl fumarate have normal lymphocyte counts, but many may have lower numbers, warranting further discussion with your Neurologist.)

S1P antagonists (fingolimod [Gilenya], siponimod [Mayzent] and ozanimod [Zeposia]) likely reduce the vaccines' immune response and therefore their efficacy. For optimized immune response to vaccination, people on S1P antagonists should receive the full dosing regimen for COVID vaccines available in Canada (2 doses). No dosing modification of S1P antagonists is recommended for vaccination. If the vaccine is administered before the start of treatment, a delay of four weeks is recommended.

Lymphocyte depletors (cladribine [Mavenclad] and alemtuzumab [Lemtrada]) should be used with caution during the pandemic because of theoretical risks of infection during the cell depletion phase. It is believed that cell repletion allows for an adequate immune response to vaccines from six months after each yearly cycle for both drugs. A delay of only three months may be acceptable if lymphocytes have recovered to near normal. Furthermore, the next treatment cycle may be delayed if required for maximizing vaccination response, depending on disease activity. If the vaccine is administered before the start of treatment, a delay of four weeks is recommended.

Intravenous anti-CD20 medications (ocrelizumab [Ocrevus] and rituximab [Rituxan]) are the only MS treatments for which some evidence suggests both an increased susceptibility to COVID-19, and a more severe COVID-19 course of infection. Vaccination should preferably be delayed as late from previous infusion as is reasonable (e.g. 4-6 months) with subsequent infusion at least four weeks after the vaccine booster (second dose). If the vaccine is administered before the start of treatment, a delay of four weeks is recommended.

Subcutaneous anti-CD20 medications (ofatumumab [Kesimpta]) is newly approved by Health Canada. With little data regarding this therapy and either COVID-19 or vaccine responses, it

might be prudent to either consider another agent or holding the start of ofatumumab at this time. If the vaccine is administered before the start of treatment, a delay of four weeks is recommended. If on ofatumumab at the time of eligibility for COVID vaccine, consider giving vaccine 4 weeks after subcutaneous injection (skip a dose), and resume ofatumumab injection 4 weeks after the second dose of vaccine.

High-Dose Steroids for Relapse [Prednisone or Methylprednisolone] should only be given if necessary. A delay to get vaccination at least 3 to 5 days after last day of steroids is reasonable.

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