



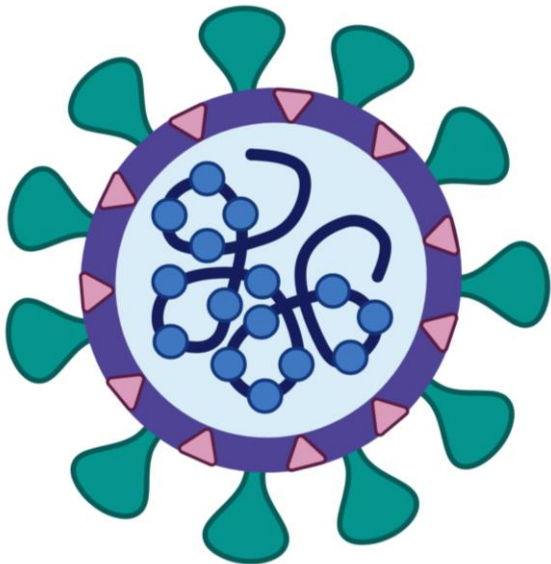
กรมการแพทย์
DEPARTMENT OF MEDICAL SERVICES



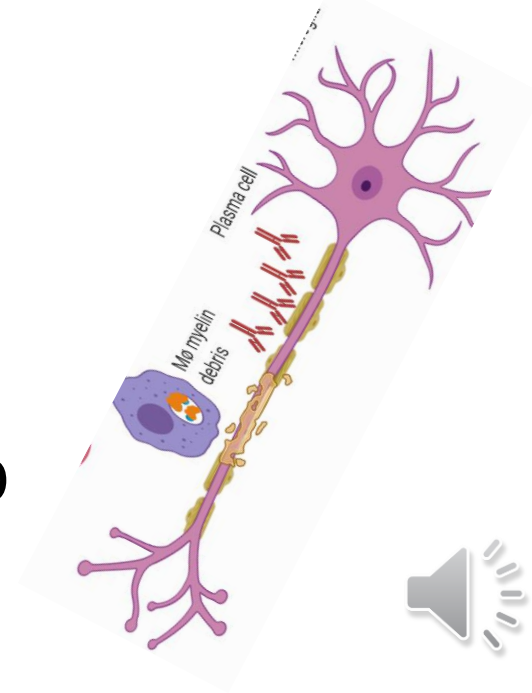
สถาบันประสาทวิทยา
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การดูแลผู้ป่วยโรคระบบประสาท ภูมิคุ้มกันในช่วงการแพร่ระบาดของโรค

COVID-19



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Patients with MS,
NMO, MG, CIDP,
myositis are
susceptible to
COVID-19 infection?

Immunosuppressant
or DMT increased risk
of COVID-19
infection?



How to advice
these patients in
the COVID-19
pandemic
situation

How to manage
these patients if
they have COVID-
19 infection



COVID-19 & Neuroimmunological disease

- There is *no evidence* that patients with MS, NMO, MG, CIDP and myositis are susceptible to COVID-19 infection
- But these patients who are on immunosuppressants or DMT *may increase the risk of infection*
- Generally, infection can *induce relapse* in immune-mediated disease or cause *new post-infectious symptoms* through molecular mimicry or enhanced inflammatory cytokines



How to advice these patients in the COVID-19 pandemic situation

1



Wash and sanitize your hands **frequently**



Disinfect **high-touch surfaces**



or



Surgical mask

n95 mask

Wear a mask if **you're sick** or advised to



2 m (6 ft) apart



Self-isolate and practice **social distancing**



Cough into your elbow or **tissues** and **dispose of tissues** right away



Avoid **non-essential and international travel**

2

Continue to use the immunosuppressants or DMTs

3

Consider themselves as the **high risks of infection**





If the patients have the indication to start immunosuppressants or DMTs, they should be initiated these drugs according to the indication or disease activity.





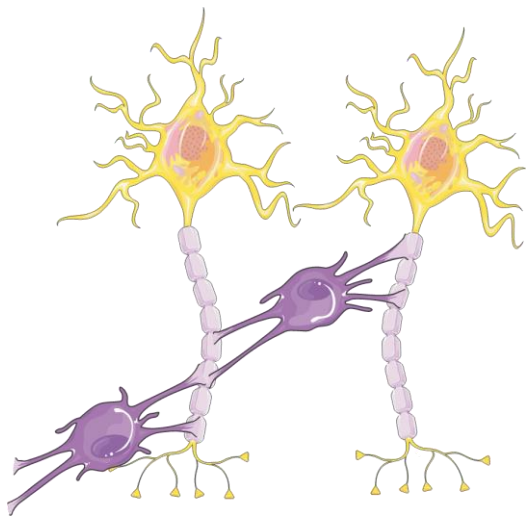
NMOSD patients

Should be **initiated or continue** to use standard Rx such as prednisolone, azathioprine, methotrexate or mycophenolate especially who have AQP4-IgG or MOG-IgG positive since they are high risk for disease relapse.

For rituximab or other anti-CD20 Rx may moderately increase risk of COVID-19 infection → consider to **avoid initiating** this medication at the pandemic situation.

But if rituximab is necessary or due date for another cycle → these patients should be strictly isolated as the **high risk patients**



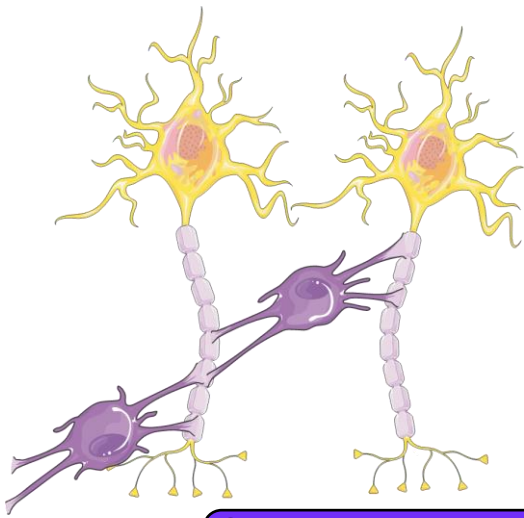


MS patients

It is safe to **initiate or continue** to use first-line standard DMTs such as **Interferon-beta, teriflunomide, glatiramer acetate**. The risk of infection may be related to lymphocyte counts

Fingolimod may moderately increase the risk of infection, but the risk of MS relapse or rebound may be higher in patients who are already on fingolimod. In case of severe infection and fingolimod is held. Re-initiation of fingolimod need to be done according to **initiation protocol**.





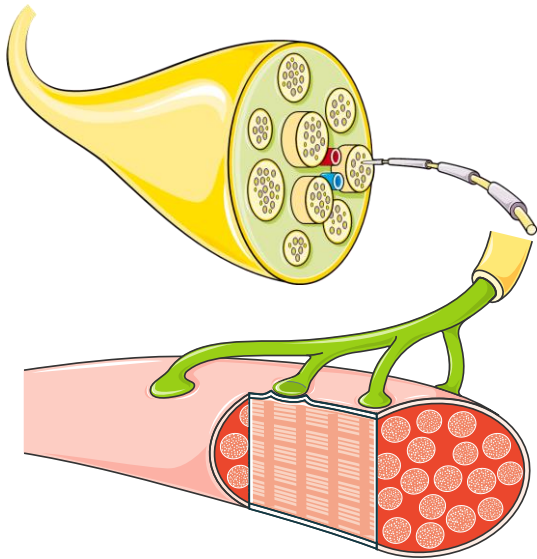
MS patients

Natalizumab can be used safely, but extended interval dosing is recommended to reduce the chance of COVID-19 encephalitis.

Alemtuzumab and cladribine increase the risk of infection especially within the first 3-6 after administration. May postpone to initiate these medication during the pandemic or postpone the second cycles of alemtuzumab to 18 months interval.

Rituximab or ocrelizumab recommendation as the NMOSD.





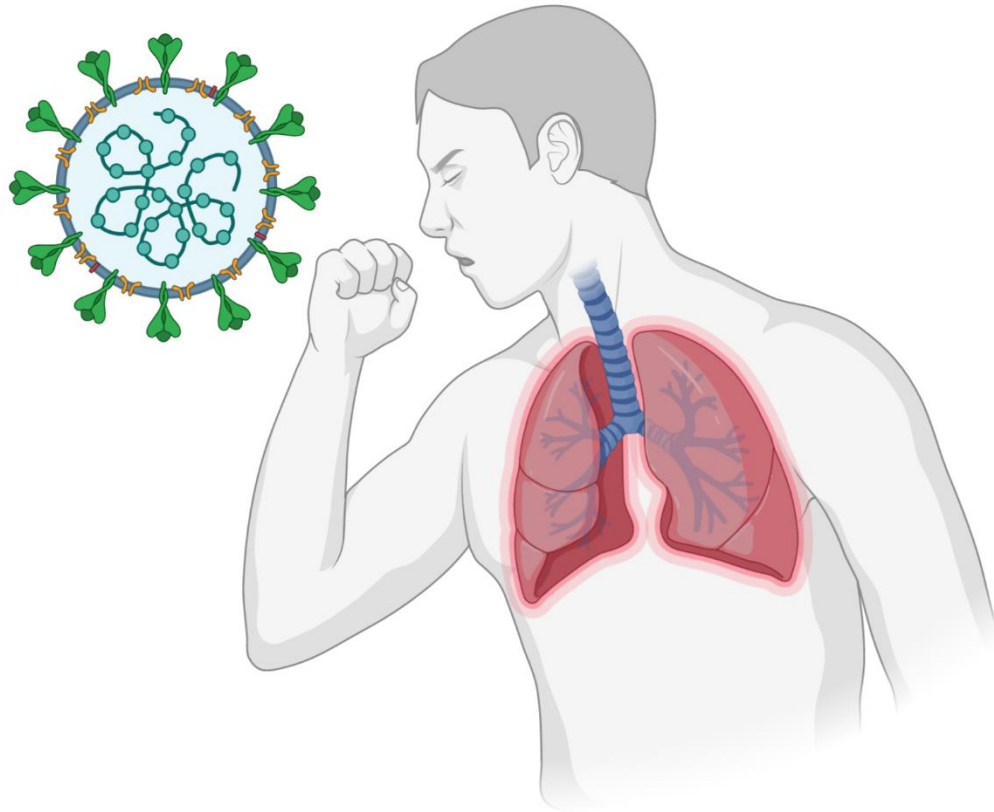
MG/LEMS, CIDP or myositis patients

Should be **initiated or continue** to use standard Rx such as **prednisolone, azathioprine, methotrexate or mycophenolate**.
But patients are needed to be aware of increased risk of infection as in NMOSD patients

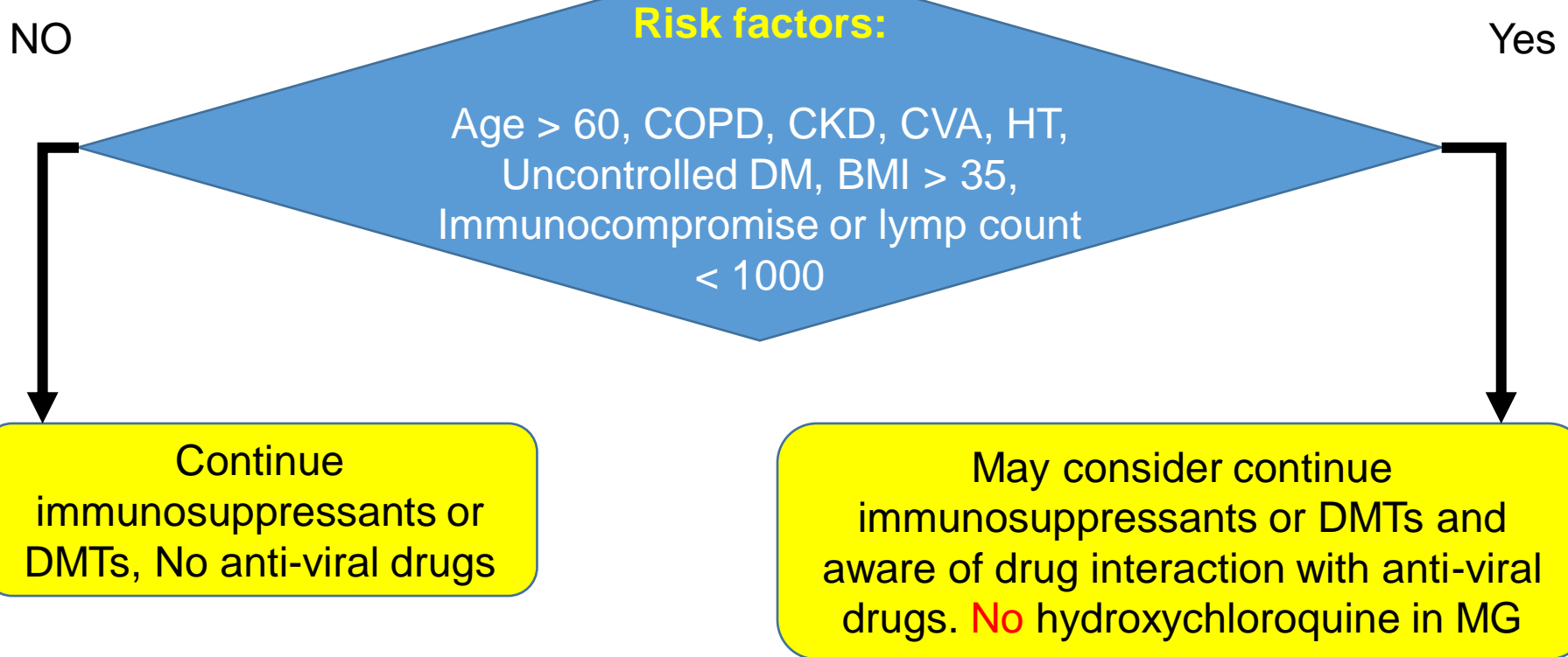
Rituximab recommendation as the NMOSD.



How to manage neuroimmunological patients who are infected with SARS-CoV-2



Asymptomatic or
Mild disease



Symptomatic drugs such as baclofen, pyridostigmine or 3,4 diaminopyridine can be used



Moderate to
severe infection



May consider **stop** immunosuppressants
or DMTs, **No** hydroxychloroquine in MG

Some data showed the benefit of IL-6R inhibitor or S1PR modulator may have benefit in COVID-19 infection. But not strongly enough to be used as the immunosuppressant therapy in all patients.

Symptomatic drugs such as baclofen, pyridostigmine or 3,4 diaminopyridine can be used

