Preliminary recommendations of the German Society of Rheumatology (DGRh eV) for the management of patients with inflammatory rheumatic diseases during the SARS-CoV-2/COVID-19 pandemic

The current outbreak of the SARS-CoV-2 infection provides countless unprecedented challenges—also with regard to the management of patients with inflammatory rheumatic disease. In an attempt to provide guidance, the German Society of Rheumatology instructed its commission for pharmacotherapy (Kommission Pharmakotherapie) to develop up-to-date recommendations for the management of patients with inflammatory rheumatic diseases during the COVID-19 pandemic. As to date there are little, if any, evidence-based data to scientifically justify guidance, the present preliminary recommendations are based on an expert consensus by 17 experienced rheumatologists in Germany, taking into account analogies to the procedures for other, longer known viral infections, theoretical considerations and already known facts about the SARS-CoV-2 infection. A deviation from these recommendations may be useful in each individual case. The recommendations will be updated frequently (www.dgrh.de). Every physician should also be aware of novel developments while the infection proceeds.

1. PREVENTION OF INFECTION

1.1. Patients with inflammatory rheumatic diseases may have an increased risk of infection (box 1). Whether this also applies to SARS-CoV-2 infections is not known. It is also not known whether COVID-19 is more severe in patients with inflammatory rheumatic diseases or whether immunosuppressive therapy represents an additional risk for a severe course. Therefore, patients with inflammatory rheumatic diseases should:

- Observe the actual measures (eg, described by the Robert Koch Institute) for the general population and for persons at particular risk.
- Consistently follow recommendations to avoid contacts to other individuals.

Box 1 Important basic risk factors for an infection in patients with inflammatory rheumatic diseases

- Higher age.
- Multimorbidity, especially pre-existing lung disease, diabetes mellitus.
- History of previous serious infections (eg, sepsis).
- Long-term therapy with glucocorticoids, especially ranging from 5 mg/day and above (risk increases with long-term treatment).
- Therapy with disease-modifying antirheumatic drugs (DMARD) and other immunosuppressive drugs (exceptions: hydroxychloroquine, sulfasalazine).
- High activity of the underlying rheumatic disease.
- Current cyclophosphamide therapy or therapy less than 8 weeks ago.
- Acquired and congenital immunodeficiencies, in particular:
  - Immunoglobulin deficiency <4 g/dL IgG
  - Lymphopenia below 500/µL, CD4 cells below 200/µL.

- Discuss with their employer to which extent contact avoidance can be implemented. Patients can be issued a certificate that they are receiving immunosuppressive/immunomodulating therapy, with which they can contact physicians in charge for their companies/public health officers/employers.

1.2. Avoid contact between SARS-CoV-2-infected persons and rheumatologists, or between infected persons and rheumatological care facilities until the infection has subsided (>14 days after the end of symptoms).

1.3. Ensure necessary controls for therapy and disease monitoring, but weigh the risk of doctor visits against the risk of missing controls in individual cases. Monitoring intervals may be prolonged in patients with stable disease and stable efficacious therapy.

2. ANTIRHEUMATIC DRUG THERAPY DURING THE COVID-19 PANDEMIC

A general interruption or reduction of immunosuppression is not recommended as patients would be at increased risk of relapse that increases the risk of infection (see box 1) and may also lead to the necessity of intensifying immunosuppressive therapy, possibly beyond the original level. Immunosuppressive therapies for remission induction (eg, for vasculitis) should not be delayed or underdosed, whereby established therapy regimes with lower glucocorticoid (GC) doses should be preferred. Hydroxychloroquine should not be discontinued as this may be more beneficial than harmful in the SARS-CoV-2 infection.

2.1. Patients without signs of infection

- Do not discontinue or reduce immunosuppressive and/or disease-modifying antirheumatic drug (DMARD) therapies solely for fear of SARS-CoV-2 infection. Consider dose reductions of GC in stable disease.
- Carefully check the dosages of immunosuppressive drugs and/or DMARDs and correct if necessary. Adjust dose as recommended in the product information in particular circumstances, for example, leucopenia.

2.2. Patients with contact to a SARS-CoV-2 positive individual, but without signs of infection

- Continue therapy as described in 2.1.

2.3. Patients with contact to a SARS-CoV-2 positive individual, and with symptoms of an infection

- Perform a test for SARS-CoV-2.
- Do not change therapy in case of mild symptoms and in the absence of fever.
- Pause antirheumatic medication in case of significant signs of infection and especially fever (>38°C).
- Continue long-term GC therapy at the same dose.

2.4. Patients tested positive for SARS-CoV-2, but without signs of infection

- Consider pausing or delaying targeted synthetic or biological DMARD therapy for 5–6 days after the test/smear has been taken.
- Continue long-term GC therapy at the same dose.
- Do not discontinue conventional synthetic DMARDs.

2.5. Patients tested positive for SARS-CoV-2, and with symptoms of an infection

- Interrupt antirheumatic medication.

- Continue long-term GC therapy at the same dose.

3. GENERAL MEASURES

- The rheumatologist should be available for consultation from the team treating the SARS-CoV-2 infection itself (primary care physician, infectious disease specialist, pneumologist, intensive care physician).
- Update the vaccination status of patients and physicians (eg, pneumococci, influenza).
- Perform pneumocystis jiroveci pneumonia prophylaxis where if indicated (eg, therapy with cyclophosphamide or GC (≥15 mg prednisolone/day)).

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