Rheumatology conditions

Travel health advice for travellers and health professionals

Key messages

- **Rheumatological conditions may increase the risk of complications from travel-related illnesses.**
- **Some travellers with rheumatological conditions will be immunosuppressed due to their treatment.**
- **Ideally all travellers should seek pre-travel health advice six to eight weeks prior to travel. This is particularly important for this group of travellers.**
- **All travellers should ensure they have comprehensive travel health insurance and declare all pre-existing health conditions.**

Overview

Rheumatological conditions affect joints, bones, muscles and soft tissues and include inflammation of joints (arthritis) and autoimmune disorders (overactive immune system damaging own tissues) such as vasculitis, soft tissue conditions, spinal pain and metabolic bone disease [1]. They include over 150 diseases and syndromes, which are usually progressive and associated with pain. The most frequently occurring inflammatory rheumatological conditions include rheumatoid arthritis and spondyloarthropathies (spinal column joint diseases). Autoimmune connective tissue diseases like Sjögren's syndrome, scleroderma and systemic lupus erythematosus are less common [2].

Rheumatological conditions are often treated with medicines which reduce inflammation and suppress the overactive immune response that cause the symptoms [3]. These improve disease control, reduce frequency of flare ups or relapse. They include disease-modifying anti-rheumatic drugs [4] and biological agents such as monoclonal antibodies and small molecule inhibitors that target key receptors, cytokines and chemokines that regulate the host immune response [3]. Individuals receiving biologic therapies often have an improved quality of life. This has contributed to the steadily growing number of immunocompromised individuals travelling to exotic destinations, potentially placing them at risk of a range of infections [3].

In summary, inflammatory rheumatological conditions can increase the risk of complications from

infections for travellers and frequency of hospital admissions compared to those of similar age without underlying inflammatory conditions. This can be due to both the disease itself and the immunosuppressive medication used to treat these conditions [4-6].

Pre-travel preparation

Travellers with rheumatological conditions planning to go abroad should be encouraged to research their destination carefully. Discussing plans with a health professional, ideally their rheumatologist as well as a travel health specialist, before booking a trip, is recommended.

Whenever possible, travellers with reduced mobility should ensure they are staying in accessible accommodation. Some travellers with rheumatological conditions prefer to organise travel with specialist travel companies that offer journey support, mobility equipment and specially adapted accommodation.

Travellers should carry a summary of their medical records, including a list of medicines, and extra supplies, including painkillers. Issues to consider (particularly if traveling with opioid pain relief) include restrictions on the type and quantity of medicines carried together with appropriate documentation when crossing international borders. See Medicines and travel factsheet.

If visiting European Economic Area (EEA) countries carry a European health insurance card (EHIC) or a UK Global Health Insurance Card (GHIC) as this will allow access to state-provided healthcare in EEA countries, at a reduced cost, or sometimes for free. However, the EHIC or GHIC, are not an alternative to travel insurance.

Comprehensive travel insurance covering all activities and destinations is essential for all travellers. A full declaration of rheumatological conditions and treatment, including medication should be made to the insurance company.

Unlike the UK, most countries do not provide free healthcare and access to appropriate, specialist medical care may be limited in some countries.

Journey risks

Active inflammation due to some rheumatological conditions may cause reduced mobility and increased tendency for blood to clot which can increase risk of venous thromboembolism (VTE) such as deep vein thrombosis or pulmonary embolism) during any long journey [7, 8].Travellers should ask their GP or specialist if compression socks or any other preventive measures are required.

As well as increasing VTE risk, sitting for a long time may cause stiffness and increase pain. Travellers with reduced mobility who need assistance should contact their airline, coach company or rail network in advance to request assistance and support. Simple requests for booking extra legroom or an aisle seat could help make a journey more comfortable.

Food and water-borne risks

All travellers should follow food and water hygiene and be aware of how to treat travellers' diarrhoea. This is particularly important for immunosuppressed travellers. Diarrhoea self-treatment medication is sometimes considered for immunosuppressed travellers at particular risk to use if unable to access medical advice. Travellers should be advised to seek early medical advice for fever, flu-like symptoms and persistent diarrhoea.

Malaria and other vector-borne risks

TravelHealthPro Country Information pages provide malaria advice and antimalarial tablet recommendations as required for destinations worldwide. In low-risk malaria risk areas, antimalarials may be considered for those at risk of severe complications from malaria infection, such as immunosuppressed travellers and those with complex multiple health problems.

Antimalarial recommendations should be tailored to individual needs, taking into account possible risks and benefits. As with any underlying condition, travellers with rheumatological conditions should be encouraged to provide detailed information about their illness and the medicines they are taking to determine the most appropriate antimalarial medicine [9]. Choice of malaria prevention medication should, when possible, be made in consultation with their rheumatologist or specialist.

Potential drug interactions with any current medication should be carefully considered and checked for, as necessary.

All travellers to malaria risk regions should be made aware of malaria symptoms, importance of compliance with any recommended antimalarial regime and need for urgent medical help for any symptoms, especially fever and/or flu like illness.

Other mosquito spread illnesses include dengue, chikungunya, West Nile and Zika. All travellers should protect against insect bites but this is particularly important for those with underlying medical problems who may be immunosuppressed, and at risk of severe complications from mosquito spread infections.

COVID-19

All individuals should follow current UK recommendations to reduce their risk of catching COVID-19 and passing it on to others.

Those with a weakened immune system are at increased risk of severe COVID-19 disease and those who are more severely immunosuppressed may not make a good immune response to COVID-19 vaccinations. For these individuals, enhanced protection measures should be followed.

Travellers who are at increased risk of severe COVID-19 disease should assess their individual circumstances, including medical facilities at their destination and consider whether postponing

travel would be appropriate.

UK Health Security Agency (UKHSA) Immunisation against infectious disease, the 'Green Book' COVID-19 chapter gives detailed advice about different ages, clinical risk groups and eligibility for COVID vaccination.

General guidance regarding risk assessment for travel during the COVID-19 pandemic and information about the COVID-19 vaccination programme is available.

Vaccination

Individuals with rheumatological conditions can be at a higher risk of infection as a result of the underlying health condition and the immunosuppressive effects of steroids, Disease Modifying Antirheumatic Drugs (DMARDs) and biologic therapy that some travellers will be taking [10]. All travellers should follow the current TravelHealthPro Country Information pages vaccine recommendations for the planned destination and tailor the vaccines received to the individual traveller's requirements and medical history.

Some travellers with rheumatological conditions may require additional vaccines or doses to provide adequate protection. Vaccine recommendations for those with underlying medical conditions is available from UKHSA [11].

Inactivated vaccines, such as those to protect against influenza, pneumococcal disease, tetanus, hepatitis B and A can be offered to individuals with rheumatoid conditions including those treated with immunosuppressive drugs. However, the immune response to a vaccine may be less for those on immunosuppressive medication and therefore the traveller may not be fully protected [3, 11].

Live vaccines can, in some situations, cause severe or fatal infections in immunosuppressed individuals, due to extensive replication of the weakened virus or bacteria used in the live vaccine. For this reason, individuals who are immunosuppressed should not be given live vaccines [11].

As the degree of attenuation, and the virulence of the infection, varies between live vaccines, it may be possible for some immunosuppressed individuals to receive some vaccines but should only be considered in consultation with an appropriate specialist following a detailed risk assessment [11].

Some medicines used for those with rheumatological conditions may increase risk of certain diseases e.g. Eculizumab, is associated with an increased risk of meningitis (*Neisseria meningitidis*) due to any serogroup [12].Therefore tetravalent conjugate vaccine (Men ACWY) and serogroup B (Men B) meningitis vaccines is offered ideally at least two to four weeks before treatment is started by the specialist. Patients receiving eculizumab less than 2 weeks after receiving meningococcal vaccine must be given prophylactic antibiotics until 2 weeks after vaccination or until protective antibody titres are present [6, 13, 14].

Routine UK vaccines

All travellers should be in date for all routine UK vaccines, including booster doses.

Immunosuppressed individuals should also be offered annual influenza vaccines and a pneumococcal vaccine [11].

Individuals with complement disorders (including those receiving complement inhibitor therapy) should be offered an annual influenza vaccine, Haemophilus influenzae type b (Hib) vaccine, meningitis vaccines (tetravalent conjugate Men ACWY and serogroup B) and pneumococcal vaccine [11].

Immunoglobulins, may also be indicated in immunosuppressed travellers exposed to infections e.g.in the event of a high-risk exposure to tetanus in patients treated with B cell depleting therapy such as Rituximab and Belimumab, passive immunisation with tetanus immunoglobulins should be considered as the immune response to tetanus vaccine may be impaired [11, 15-16, 18].

Other health risks

Individuals with rheumatological conditions taking immunosuppressive drugs are at increased risk of complications from bacterial, fungal and parasitic, as well as viral infections [5]. Outdoor activities that increase risk of infections as a result of exposure to bird or bat droppings, dust, fungal spores and soil should ideally be avoided [18].

Travellers who are immunosuppressed should take particular care in the sun. Immunosuppressive treatments can weaken the immune system of the skin, leading to an increased risk of skin cancer [18]. The autoimmune condition Lupus can be exacerbated by sunlight. Individuals with lupus are advised to protect their skin from sunlight at all times, by wearing high-factor sunscreen on all skin exposed to light, even on cloudy days [19].

Some studies have highlighted that skin and respiratory infections are more frequent in travellers using immunosuppressants [3, 20].

Any co-existing conditions, and treatments, need to be considered when advising travellers with rheumatological conditions. All travellers should be encouraged to make a full declaration of their medical history. This enables health professionals to carry out effective risk assessment of all underlying conditions, contraindications and potential drug interactions. Best practice advocates a collaborative approach with the traveller, their general practitioner, relevant specialist and the travel medicine expert [3].

Resources

- ABTA: Accessible travel
- British Society for Rheumatology: Guidelines

- Civil Aviation Authority: Passengers with disabilities and reduced mobility. Information about your rights and how to access special assistance
- Lupus UK: Going on Holiday with Lupus
- NHS: Apply for a free EHIC (European Health Insurance Card)
- NHS: Rheumatoid arthritis – Biological treatments
- National Institute for Health and Clinical Excellence. Drug treatment for rheumatoid arthritis
- National Rheumatoid Arthritis Society: My travels with Rheumatoid Arthritis
- Travelling with additional needs and/or disability
- Versus Arthritis: Travelling with Arthritis

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