

Overlap in symptoms of rheumatic flare and COVID-19 may delay diagnosis



People with rheumatic diseases are more likely to suffer from severe symptoms of COVID-19.

INTRODUCTION

COVID-19 is the disease caused by a new type of coronavirus called severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2). It was declared a pandemic by the World Health Organization on 11 March 2020. COVID-19 has forced people to change their behaviours to try to limit the spread of infection.

Some people with rheumatic diseases are more likely to get infections. Some people are also more prone to complications when they get an infection. This is partly because of their underlying disease, and partly because some medicines used to treat rheumatic diseases work by suppressing the immune system.

WHAT DID THE AUTHORS HOPE TO FIND?

The authors wanted to find out about the symptoms of COVID-19 in people with rheumatic diseases. They hoped that this would help doctors to quickly identify the infection in people with rheumatic diseases.

WHO WAS STUDIED?

The study looked at 21 people with COVID-19 who had previously been diagnosed with a rheumatic disease. Everyone had been admitted to Tongji Hospital in Wuhan, China, between 13 January and 15 March 2020. Of these, eight people had rheumatoid arthritis (often shortened to RA), four had systemic lupus erythematosus (SLE), three had primary Sjögren's syndrome (pSS), two had undifferentiated connective tissue disease, one had polymyalgia rheumatica (PMR), one juvenile idiopathic arthritis (JIA) and two had ankylosing spondylitis (AS). There was a range of severity, with some people only mildly affected by their rheumatic disease, and others who were critically ill.

HOW WAS THE STUDY CONDUCTED?

This was a retrospective study, which means the authors looked back through medical records to find the information. From a total of 2326 people with COVID-19 who had been admitted to the hospital, 21 had an underlying rheumatic disease. The authors collected information about the age, gender, and medical history of those people, and how severe their COVID-19 infection had been. They also recorded the treatments that people had been taking, both before and after their COVID-19 diagnosis.

WHAT WAS THE MAIN FINDING?

The main finding was that respiratory failure was more common in people with underlying rheumatic disease and COVID-19. Overall, 38% of people with rheumatic diseases had respiratory failure, compared to just 10% of the people without. People with rheumatic diseases also needed to stay in hospital longer. There was no difference between the groups in the probability of dying from COVID-19.

While they were in hospital, four of the patients had a flare (worsening) of their rheumatic disease. The authors also found some symptoms of rheumatic flares that can look similar to COVID-19, for example, fever, respiratory symptoms, fatigue and diarrhoea. This might lead to a delay in diagnosing the infection in people with underlying rheumatic disease. Because of this, tests should be used to differentiate symptoms of COVID-19 from a flare or pre-existing lung condition in people with a rheumatic disease. The authors also collected information on the antirheumatic medications that were used. This will be useful to help work out whether people with rheumatic diseases can keep taking their normal medicines while they are being treated for this new viral infection.

ARE THESE FINDINGS NEW?

Yes. This was one of the first studies to describe the clinical features of COVID-19 in people with rheumatic disease, and it is the first from the city where the virus is thought to have originated.

WHAT ARE THE LIMITATIONS OF THIS STUDY?

The main limitation is that this study was quite small, and everyone included had been treated at a single hospital. This might mean that the results would not be the same for people from other regions or with other types of rheumatic disease.

WHAT DO THE AUTHORS PLAN TO DO WITH THIS INFORMATION?

The authors are collecting more data from other hospitals in the Hubei province of China. They hope to be able to confirm the findings in a bigger sample of people.

WHAT DOES THIS MEAN FOR ME?

These findings suggest that if you have a rheumatic disease and you get COVID-19, you are more likely to have severe symptoms than people without a rheumatic disease. You may need to stay in hospital for longer.

Protect yourself from COVID-19 by following the advice of the government in your country, including washing your hands regularly, avoiding touching your face, and following social distancing rules.

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