

Flare likely after vaccination, but can be prevented with colchicine



COVID-19 vaccination associated with increased likelihood of gout flare

INTRODUCTION

Gout is a very common condition, affecting up to 2–4% of adults in developed countries. The symptoms tend to flare every so often, developing over a few hours and causing severe pain in the joints. It is caused by deposits of crystals of a substance called uric acid (urate) in the joints, which leads to inflammation.

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.

Gout is associated with several other diseases (comorbidities) that are linked to poor outcomes in COVID-19, and gout flares can be triggered by some vaccinations.

WHAT DID THE AUTHORS HOPE TO FIND?

The authors hoped to learn whether COVID-19 vaccination affects the risk of gout flares. They also wanted to see whether a medicine called colchicine could reduce the risk of gout flares after COVID-19 vaccination.

WHO WAS STUDIED?

The study looked at 549 people with gout. Of these, 462 had received a COVID-19 vaccine based on an inactivated virus – the only one currently available in China.

HOW WAS THE STUDY CONDUCTED?

This was a non-interventional observational study of people seen at one clinic in China. The authors used medical records and face-to-face interviews to collect data about vaccinations and people's potential risk factors that might make them more likely to have a gout flare.

The interviews were based on a questionnaire about gout disease activity, flares, and the type and date of each vaccine. Everyone was asked to recall the date of any gout flares, and any clinical signs and symptoms within 3 months before and after receiving the COVID-19 vaccine. This information was cross-checked in each person's medical record.

The information collected was used to analyse the risk of gout flares in the first 3 months after COVID-19 vaccination with inactivated virus. They also investigated whether taking colchicine was associated with reduced gout flares after COVID-19 vaccination.

WHAT WERE THE MAIN FINDINGS OF THE STUDY?

The main finding was that gout flares were more common after COVID-19 vaccination, particularly in the month after vaccination. Compared with unvaccinated people, those who had received a COVID-19 vaccine were 6-times more likely to have a gout flare in the following 3 months. However, people using colchicine were 47% less likely to have a flare after their vaccination.

ARE THESE FINDINGS NEW?

Yes, this is the first study to report whether gout flares occur more often after COVID-19 vaccination.

WHAT ARE THE LIMITATIONS OF THE STUDY?

The main limitation of this study is its observational design, and collecting data in interviews might be subject to recall bias. Also, the results may not apply to other COVID vaccine types such as those based on mRNA, viral vector, or protein subunits. More studies are needed to examine the rate of gout flares after other kinds of COVID-19 vaccination.

WHAT DO THE AUTHORS PLAN ON DOING WITH THIS INFORMATION?

The authors are doing a prospective study to confirm their conclusions.

WHAT DOES THIS MEAN FOR ME?

If you have gout, you may experience flares around the time of your COVID-19 vaccination. Knowing this means you can plan ways to prevent the flares through medicine and diet, and treat them quickly if they do occur.

If you have any concerns about your disease or its treatment, you should speak to your doctor.

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Date prepared: July 2022

Summary based on research article published on: 11 March 2022

From: Lu J, *et al.* Colchicine prophylaxis is associated with fewer gout flares after COVID-19 vaccination. *Ann Rheum Dis* 2022;81:1189–93. doi:10.1136/annrheumdis-2022-222199

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