

Metabolic syndrome is common in patients with SLE, but can be managed

SLE and metabolic syndrome may be related, and patients with SLE are more likely to develop cardiovascular problems.

INTRODUCTION

Systemic lupus erythematosus (also called lupus or SLE) is an autoimmune disease where the body's immune system attacks healthy tissues in the skin, joints and internal organs. This can cause rashes, pain, swelling and fatigue (extreme tiredness), although symptoms may vary from person to person. Some patients will have periods with few or no symptoms, followed by flares of their disease, while others will have ongoing disease.

The metabolic syndrome is a group of risk factors such as high blood pressure or elevated cholesterol levels that make it more likely that a person will develop cardiovascular diseases such as heart attack or stroke. It has previously been shown that people with SLE are more likely to have coronary heart disease, and metabolic syndrome may contribute to this risk.

WHAT DID THE AUTHORS HOPE TO FIND?

The authors hoped to understand what factors in patients with early SLE might contribute to the development of the metabolic syndrome. By identifying these factors they hoped to better understand why patients with SLE go on to develop cardiovascular disease, and perhaps to be able to identify factors that could be managed differently in early disease to help prevent cardiovascular disease.

WHO WAS STUDIED?

The study included 1,150 patients with early SLE at clinics in 11 countries. Early SLE was defined as a diagnosis within the last 15 months. These patients had a follow-up visit with the clinic every year as part of their usual care plan. Most of those studied were women, with an average age of 34.9 years. The patients were typical of those attending the clinics in general, with a wide representation of ethnic backgrounds and a range of disease symptoms.

HOW WAS THE STUDY CONDUCTED?

The Systemic Lupus International Collaborating Clinics (SLICC) is an observational study, which means that patients are enrolled and medical information is recorded at regular intervals in a database, but there is no intervention or drug being investigated. The authors examined data from the database from patients during their first 2 years of follow-up.

WHAT WERE THE MAIN FINDINGS OF THE STUDY?

The authors found that the metabolic syndrome is very common in patients with early SLE, even in younger women. They also found that the metabolic syndrome is an ongoing problem in a lot of patients with SLE. Several factors were found to be associated with developing metabolic syndrome, including having renal lupus (disease in the kidneys) or active inflammatory disease, and it is therefore possible that doctors could use these factors to identify patients who might be at higher risk. It was also found that antimalarial drugs such as hydroxychloroquine may protect against developing metabolic syndrome.

ARE THESE FINDINGS NEW?

Some parts of these findings are new. It was already known that metabolic syndrome is more common in patients with SLE, but the reasons for this are not clear. Most previous studies have examined older groups of patients with stable longer-lasting disease at just one time point. This study is novel in its size, international breadth, focus on very early disease and the fact that it followed patients over at least 2 years. The finding that antimalarial drugs may protect against developing metabolic syndrome is very interesting, as it is a key part of management for SLE patients, but is not always prescribed. The authors have also described how simple clinical tools can be used by doctors to identify patients at higher risk of developing metabolic syndrome and cardiovascular disease.

HOW RELIABLE ARE THE FINDINGS?

There are some limitations to the study. Firstly, not every patient entered into the study database was included in this analysis as many of them had key pieces of data missing, which may mean that there is a bias in the

results, or that they are not truly representative of all patients with SLE. Secondly, the cohort does not have a healthy control group against which to compare the findings.

WHAT DO THE AUTHORS PLAN ON DOING WITH THIS INFORMATION?

The authors are currently examining what the link might be between SLE and metabolic syndrome, and plan to extend the follow-up time from 2 years to 5 years. The data in the SLICC cohort will be used for many more studies to examine why patients with SLE are significantly more at risk of developing future heart disease at a younger age than people without SLE.

WHAT DOES THIS MEAN FOR ME?

Many factors associated with the metabolic syndrome are related to a person's lifestyle, and that means that patients can help manage their risk – for example, by maintaining a healthy weight and good blood pressure. However, many of these factors are made worse simply by having SLE in the first place, or by having to use steroid medicines, and doctors managing SLE should be aware of this. Newer treatment plans try to minimise steroids, and this may improve the future risk of developing heart disease. If you have SLE and are concerned about metabolic syndrome or your cardiovascular health you should talk to your doctor.

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