

Previous bacterial infection increases risk of newly-diagnosed Sjogren's syndrome syndrome

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The results of a study presented today at the Annual European Congress of Rheumatology (EULAR) 2017 have shown a link between newly-diagnosed Sjögren's syndrome (SjS) and previous infection with nontuberculous mycobacteria (NTM).

However, even though an increased risk of tuberculosis (TB) has been found in patients with SjS, in this study, TB infection itself did not appear to be associated with an increased risk of going on to develop SjS.

Patients newly diagnosed with primary SjS (in people with no other rheumatic disease) were around 11 times more likely to have had a prior infection with NTM than a matched group of controls. The magnitude of the association between NTM and SjS risk was greatest among those patients aged between 45 and 65 years. No association was found between SjS and a previous TB infection.

"Although the exact disease mechanism behind SjS remains elusive, a variety of environmental, genetic and hormonal factors have been linked with the development and different manifestations of this debilitating disease," said lead author Dr. Hsin-Hua Chen from the Taichung Veterans General Hospital, Taiwan, Province of China. "Identifying NTM as one of the triggers will hopefully provide a clue to the future development of a targeted therapy for these patients," he added.

After excluding those SjS patients who had rheumatoid arthritis (RA) and [systemic lupus erythematosus](#) (lupus), an association was observed between NTM infection (Odds Ratio, 11.24; 95% confidence intervals, 2.37-53.24) and SjS among 5,751 newly diagnosed cases compared to 86,265 non-SjS patients matched for age, sex, and year of first diagnosis. The diagnosis of NTM was established using ICD9-CM disease codes, as well as the prescription of NTM related anti-bacterial medication. The association was quantified after adjusting for the Charlson comorbidity index and bronchiectasis .

"Because SjS is a disease of insidious onset, we can't exclude the possibility that it may have occurred before the NTM infection. In our study, of the seven subjects with NTM infection later diagnosed with SjS, three of them were diagnosed within three months of NTM infection, indicating the potential co-existence of these two diseases. However, the other four subjects were diagnosed on average 2.9 years after NTM infection.

"The significant association between NTM [infection](#) and newly diagnosed SjS demonstrated in our study certainly supports the need to screen for the presence of SjS in any patient previously infected with NTM to enable prompt diagnosis and treatment," Dr. Chen concluded.

SjS is an immune mediated chronic inflammatory disease where the body's immune system attacks glands that secrete fluid, such as the tear and saliva glands. Inflammation within the glands reduces fluid production causing painful burning in the eyes, dry mouth, and sometimes dryness in the nasal passages, throat, vagina and skin.

Primary SjS occurs in people with no other rheumatic [disease](#); secondary SjS occurs in people who have another [rheumatic disease](#), most often lupus and RA.³ The worldwide prevalence of primary SjS has been estimated at about 0.2 percent of the adult population.

This condition can affect people of any age, but symptoms usually appear between the ages of 45 and 55. It affects 10 times as many women as men. About half of patients also have RA or other connective tissue diseases, such as lupus.³

Provided by European League Against Rheumatism

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