Hope for patients with rare Sjögren's syndrome

October 29 2019

Professor Fai Ng. Credit: Newcastle University

A new study has shed light on a debilitating autoimmune condition by

identifying a number of subtypes of the disease which could lead to personalised treatment for patients.

For the first time, scientists at Newcastle University have found there are at least four versions of primary Sjögren's syndrome (PSS) - a chronic inflammatory disease that affects the parts of the body that produce fluids, like tears and saliva.

The study, published in *The Lancet Rheumatology*, shows that the different types of PSS have unique patterns of clinical and biological characteristics that may respond to different treatments.

Chronic condition

Sjögren's syndrome is an incurable disease which affects up to 1.2% of the population and is characterised by oral dryness, muscle pain and severe fatigue.

Scientists believe their findings have key implications for drug development, particularly in clinical trial design and informing molecular targets.

Professor Fai Ng, from Newcastle University's Faculty of Medical Sciences, led the European study, which is the first to report distinct subtypes of the immune inflammatory disease.

He said: "We are very excited about our findings. To date, we have no effective treatment for this condition and we believe our study may help significantly with drug developments into PSS.

"One of the key barriers to research has been that the clinical presentations of patients with the condition differs markedly from patient to patient.

"Knowledge of these subtypes will now help us to develop more personalised management plans for those with the condition, which in turn will help to improve people's quality of life."

The traditional view is that PSS only has two main subtypes but this has been viewed as too simplistic as many patients don't fall into the two classical groups.

Team science approach

Using data from the UK Sjögren's syndrome registry, experts identified four subtypes with distinct clinical and biological profiles, suggesting patients are likely to differ in their response to targeted therapies.

Professor Fai Ng, also a Consultant Rheumatologist at Newcastle Hospitals NHS Foundation Trust, said: "We find it particularly fulfilling that many patients can identify with these new subtypes, and that they 'make sense' to them in understanding the symptoms of their condition.

"A vital lesson we've learnt is the importance of a team science approach—we didn't rely on clustering metrics alone, but took into consideration clinical experience and common sense."

Further research will focus on the biology of each Sjögren subtype; to test the stability and long-term outcome of each subtype and to validate the different responses to treatment of each.

Patient's story

Sjögren's syndrome patient Pat Beaumont has lived with the condition for more than a decade and knows first-hand the difficulties it brings day-to-day.

The HR consultant realised something was wrong when she began to suffer from chronic fatigue, dryness of the eyes and unexplained bruising. It took 18-months for a definitive diagnosis as medics were unable to get to the root of the problem.

Pat, 69, from Alnwick, Northumberland, said: "With this research I can identify what subtype I belong to and this is important as I can discuss with my consultant what medical issues I need to address.

"It gives hope for developing effective treatment and a holistic approach for patients to manage their symptoms—this is of huge significance as dealing with symptoms day-to-day is one of the biggest burdens for patients.

"Clearer understanding of symptoms—which these subtypes help with—allows patients to devise their own management 'package' which does not necessarily need to involve medicines.

"It's great that Newcastle University is leading the way in Sjögren's syndrome and furthering understanding of the condition."

More information: Jessica R Tarn et al. Symptom-based stratification of patients with primary Sjögren's syndrome: multi-dimensional characterisation of international observational cohorts and reanalyses of randomised clinical trials, *The Lancet Rheumatology* (2019). DOI: 10.1016/S2665-9913(19)30042-6

Provided by Newcastle University

Citation: Hope for patients with rare Sjögren's syndrome (2019, October 29) retrieved 1 May 2024 from https://medicalxpress.com/news/2019-10-patients-rare-sjgren-syndrome.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.