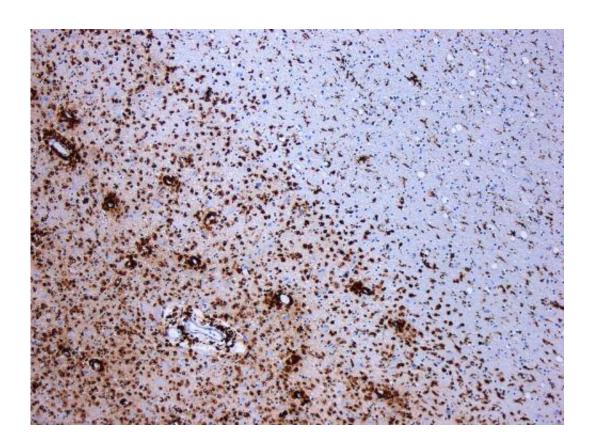


Medical history reveals multiple sclerosis begins to impact patients sooner

April 20 2017



Demyelination by MS. The CD68 colored tissue shows several macrophages in the area of the lesion. Original scale 1:100. Credit: <u>CC BY-SA 3.0</u> Marvin 101/Wikipedia

People with multiple sclerosis can show signs of something wrong five years before the onset of disease, much earlier than previously thought, according to a new analysis of health records from people with the



condition.

The new research, published today in *Lancet Neurology*, is a first step to identifying red flags to help doctors screen for the disease and start interventions earlier. This could point researchers in a new direction for finding the root cause of the disease.

"Proving that <u>people</u> with multiple sclerosis have already changed their behaviour in the five years before even the earliest medical recognition of the condition is very important because it means we have to look beyond those five years to understand how it is caused," said Helen Tremlett, senior author of the study and a professor in the department of medicine at the Djavad Mowafaghian Centre for Brain Health.

Multiple sclerosis is thought to be an autoimmune disease where the body attacks the protective coating, known as myelin, around brain cells. Once a person is diagnosed with multiple sclerosis, a physician will try to pinpoint the onset of the disease, sometimes known as the patient's first demyelinating event, and can include problems with vision or motor control.

The researchers examined <u>health</u> records of 14,000 people with multiple sclerosis from B.C., Saskatchewan, Manitoba and Nova Scotia over a 20-year period and compared them to the <u>health records</u> of 72,000 people without the disease. They were looking for something called a prodrome, an early set of symptoms that can indicate the onset of a disease.

Prodromes have been identified for other neurological conditions like Alzheimer's and Parkinson's diseases. The recognition of these prodromes has provided clues about how the diseases might begin and has stimulated new research into causes or triggers.



This study of patients from across Canada revealed that there is a phase where people begin to show symptoms before multiple sclerosis is medically recognized. During this phase patients tend to visit their physicians, be admitted to a hospital and fill prescriptions more than the general population.

"There's something going on here that makes this population of people unique," said José Wijnands, first author of the manuscript, a postdoctoral fellow and a Michael Smith Foundation for Health Research trainee.

"When other <u>degenerative brain diseases</u> have a prodrome, it suggests that something may be happening," said Tremlett. "We hope to uncover what this might be in multiple <u>sclerosis</u>."

Going forward, the team of researchers will try to understand why these patients had been using the health-care system differently, and whether there are trends in illnesses reported and prescriptions filled that point to a specific set of symptoms that doctors could use to help identify multiple sclerosis earlier.

Provided by University of British Columbia

Citation: Medical history reveals multiple sclerosis begins to impact patients sooner (2017, April 20) retrieved 4 May 2024 from https://medicalxpress.com/news/2017-04-medical-history-reveals-multiple-sclerosis.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.