

Lay Summary

BRAIN UK Ref: 23/011

Clinicopathological correlations of immune response in inflammatory neuropathies

Prof Sebastian Brandner and Dr Francesco Gentile, University College London

Some people have problems with their nerves that cause pain, weakness, numbness or tingling in their arms or legs. These problems are called inflammatory neuropathies and they happen when the body's immune system attacks the nerves by mistake. There are different types of inflammatory neuropathies, and they can be hard to diagnose and treat.

Sometimes doctors need to take a small piece of nerve from the leg (called a sural nerve biopsy) and look at it under a microscope to see what is wrong. In our department we have many such biopsies in our archive. In this study we want to examine nerve biopsies from over 10 years with new methods:

We will use a computer program that can scan the nerve images and measure how much inflammation there is and what kind of cells are involved (such as white blood cells that are part of the inflammation). We will also compare the nerve biopsy results with the patients' symptoms, diagnosis, treatment and progress. This may help us understand more about how inflammation affects the nerves in different ways and what treatments work best for different patients.