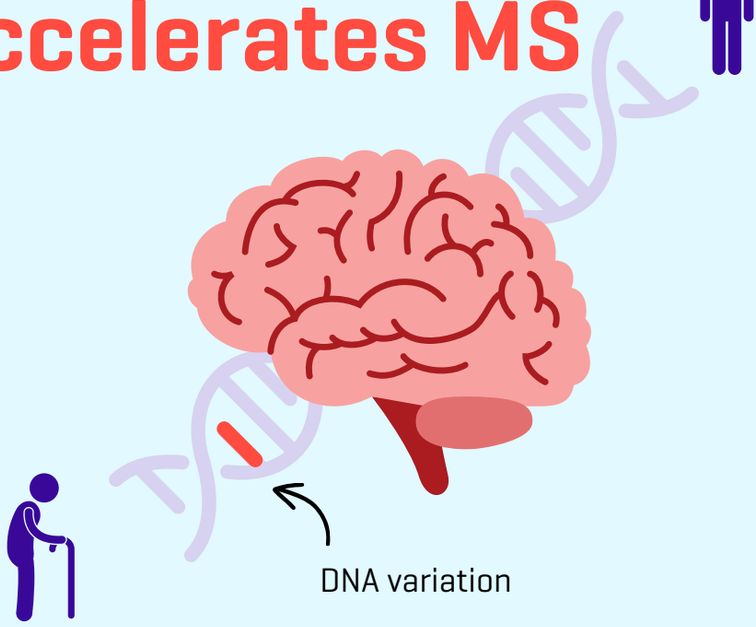
DNA-variation accelerates MS



According to a recent study, individuals with a particular unfavorable DNA variation and multiple sclerosis are prone to earlier need for a walking stick.

What is MS?

Multiple sclerosis (MS) is an inflammatory disease of the central nervous system characterized by localized inflammation in the brain. This results in young adults experiencing neurological disability prematurely.

Previous studies have already identified over 200 variants that influence the development of MS. Interestingly, these variants do not appear to have an impact on the progression of the disease. This suggests that there may be other genes involved in the progression of the disease than those associated with its onset.

Genes involved in disease progression vs **Genes involved in disease onset**

12.584 people with MS

To gain insight into the underlying mechanisms that determine disease progression, a new study was conducted examining the genetic material of 12,584 individuals with MS.

Netherlands Brain Bank

At the Netherlands Brain Bank, we have brains from deceased donors with MS. Researchers examined whether carriers of the identified genetic variation had more severe MS-related changes in their brains. The results indicate that individuals who carried the unfavorable genetic variation had nearly twice as many MS abnormalities in both the gray and white matter compared to MS donors without this variation.

This validation suggests that this DNA variation may indeed be truly relevant to people with MS.

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