The gut microbiota in neurological disorders

Marta Grochowska, Marek Radkowski

Department of Immunopathology of Infectious and Parasitic Diseases, Medical University of Warsaw, 3c Pawińskiego St., 02-106 Warsaw, Poland

The global incidence such neurological diseases, e.g. Multiple Sclerosis, Alzheimer's Disease and Parkinson's Disease is increasing while their detailed pathogenesis and treatment effects remain unclear. Bidirectional communication between central nervous system and gut microbiota may represent one of the underlying mechanisms. In human intestine reside up to 1000 bacterial species, which colonize the gut shortly after birth and remain for whole life. It is suggested that microbiota composition can contribute to risk of neurological disorders, disease course or treatment response providing a possible promising tool in neurological disorders treatment.