

## **Neurodegenerative diseases - an overview**

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Abstract: While conditions such as Alzheimer's disease (AD) and Parkinson's disease (PD) are classical examples of neurodegenerative diseases, recent investigations have focused on other contributing mechanisms, such as inflammation. Conversely, diseases such as multiple sclerosis (MS) have long been described as primarily involving inflammatory and demyelinating processes, but exhibit neurodegenerative aspects that have been a more recent focus of investigation, in particular with the use of in-vivo imaging. This presentation will focus on the challenges for MRI to distinguish neurodegeneration, inflammation and repair in the pursuit of improved disease characterization, disease monitoring, and assessment of treatment response.