Dementias associated with movement disorders: Motor Neuron Disease (MND), Progressive Supranuclear Palsy (PSP) and Corticobasal Degeneration (CBD).

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For many years neurological diseases presenting predominantly with motor symptoms on the one hand and dementias on the other were treated as two entirely different disease groups. However, recent discoveries in pathology, genetics and molecular biology have demonstrated that “motor” and “cognitive” disorders share not only clinical symptoms but also the underlying biological mechanisms. An example of this is the recent discovery that a mutation in the C9ORF72 gene can result in MND as well as FTD.

In my presentation I will describe the cognitive profiles of MND, PSP and CBD, emphasising the typical evolution of their clinical presentations. Patients presenting initially with a purely cognitive clinical picture can nevertheless subsequently develop MND, PSP or CBD. On the other hand, parkinsonism or apraxia can lead with time to dementia. Finally, I hope to demonstrate how the advances in our understanding of physiology and pathology can help explain the pattern of cognitive deficits seen in these conditions.