The use of magnetic resonance imaging (MRI) in the management of multiple sclerosis in the UK

Schmierer K, Marta M, Turner BP, Giovannoni G Queen Mary University of London, Blizard Institute, Barts and The London School of Medicine & Dentistry

Background: MRI is established to support the diagnosis of MS. There is no consensus on using MRI to monitor the response to disease-modifying therapies (DMTs).

Objectives: To explore how MRI is used to monitor MS in the UK.

Methods: A web-based survey was sent to 108 UK neurologists with a special interest in MS.

Results: 56/108 neurologists (52%) responded; 26% use MRI to confirm relapses, 42% to monitor disease progression in the absence of relapses. 59% use MRI to monitor treatment, however only 9% do so routinely. 59% of those using MRI for treatment monitoring include gadolinium-enhanced scans. 46% felt that 'treating-to-target' (T2T) of 'no evident disease activity' (NEDA, a composite of relapses, disease progression, and lesions on MRI) is a reasonable aim in treating MS. Over 50% consider brain volume loss (BVL) a relevant index in MS. However, most neurologists feel more data on the predictive value of BVL is needed for its use in clinical decisions.

Conclusion: MRI is increasingly used to monitor MS as part of an emerging strategy (T2T of NEDA). BVL is recognised as important in MS, however more data correlating BVL with clinical outcomes is needed before adopting BVL into the definition of NEDA.