This is a digest of selected articles published in peer reviewed journals over the last quarter relevant to health and social care professionals working to support people with MS.

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Disease modifying treatments


Guideline sets out best practice in prescribing and monitoring disease modifying drug therapies in relapsing MS. It includes all new disease modifying treatments and provides a consensus on their use that incorporates advances in diagnosing MS that have occurred since the previous revision in 2009. Authors put greater emphasis on starting drug treatment earlier and on monitoring for the effectiveness of treatment, including more use of MRI scans than in previous guidance.


Is it time to target no evident disease activity (NEDA) in multiple sclerosis?

This paper introduces a new treatment paradigm that individualises treatment with disease modifying therapies based on a choice between maintenance–escalation or induction therapy. Authors propose treatment to target of NEDA, where MS disease activity is monitored using a combination of clinical measures and MRI. Evidence of MS activity would trigger discussion of switching therapy. Authors envisage that the definition of NEDA will evolve.

Mult Scler Relat Disord 2015;4(4):329-33. [Ref 19-4-2]
http://tinyurl.com/QMSRU-19-4-2

MS relapses


Double-blind randomised controlled trial assigned 200 people experiencing MS relapse to either oral or intravenous methylprednisolone 1000mg a day for three days. Primary endpoint was the proportion of people who had improved by day 28. Authors concluded that oral administration of high-dose methylprednisolone for three days was not inferior to IV administration and had a similar safety profile. This could have implications for access to treatment and cost.

Lancet 2015;386 (9997):974–81. [Ref 19-4-3]

Asano M, Hawken K, Turpin M, et al.
The lived experience of multiple sclerosis relapse: how adults with multiple sclerosis processed their relapse experience and evaluated their need for post relapse care.

Four patterns of relapse management were identified from analysis of semi structured interviews with 17 people with relapsing MS. These were: active relapse manager; early stage proactive relapse manager; adapted passive relapse manager; passive relapse monitor. Authors found that the interpretation people made of their relapse experience was closely associated with their perceived need for post relapse care and suggest that this can highlight the need for multidisciplinary rehabilitation beyond the acute relapse experience.

Mult Scler Int 2015;2015:351416. [Ref 19-4-4]
http://tinyurl.com/QMSRU-19-4-4
Symptoms

Gal RL, Vedula SS, Beck R.

Corticosteroids for treating optic neuritis.

Authors found no conclusive evidence of benefit in terms of recovery to normal visual acuity, visual field or contrast sensitivity six months after initiation with either intravenous or oral corticosteroids at the doses evaluated in the five trials included in this systematic review.

Cochrane Database Syst Rev 2015;8:CD001430. [Ref 19-4-5]

http://tinyurl.com/QMSRU-19-4-5

Panicker JN, Foeber CJ, Kessler TM.

Lower urinary tract dysfunction in the neurological patient: clinical assessment and management.

Review highlights the importance of history taking and use of the bladder diary to provide a real time assessment of urinary symptoms. In cases of combined storage and voiding dysfunction, authors suggest the more dominant component should be tackled first. Principles of management are explored and case studies included which underline the need for an individualised patient centred approach to management of lower urinary tract dysfunction.

Lancet Neurol 2015;14(7):720-32. [Ref 19-4-6]

McGinnis E, Andrea Nelson E, Gorecki C, Nixon J.

What is different for people with MS who have pressure ulcers: a reflective study of the impact upon people’s quality of life?

Semi structured interviews of six people (five women) with MS were transcribed and explored. Three of the participants had more than one pressure ulcer (PU) and duration of PUs ranged from three months to five years with location including sacrum, buttocks or thighs and heels or ankles. These findings were compared with a wider cohort of people with PUs who did not have MS, and demonstrated that people with MS found their lives were affected physically, psychologically and socially. Compared to other groups, people with MS expressed optimism and positive emotions, although all participants were restricted in their activity.

J Tissue Viability 2015;24(3):83-90. [Ref 19-4-7]

Assessment tools


Tablet-based screening improves continence management in multiple sclerosis.

157 people with MS completed an electronic continence questionnaire on the Tablet based Data capture in Multiple Sclerosis (TaDiMuS) tool. This clinic waiting room screening aimed to determine if this approach could provide early identification of bladder and bowel problems and optimise their management in a multiple sclerosis clinic. As a result of the screening 57 formal continence assessments were carried out by an MS continence nurse and at least one clinical intervention was made in each case. Authors found this an efficient, sensitive and feasible method for screening MS patients for bladder and bowel dysfunction that improved efficiency in the multidisciplinary MS clinic.

Ann Clin Transl Neurol 2015;2(6):679-87. [Ref 19-4-8]

Vitamin D

Mokry LE, Ross S, Ahmad OS, et al.

Vitamin D and risk of multiple sclerosis: a Mendelian randomization study.

Authors identified single nucleotide polymorphisms (SNPs) associated with the 25-hydroxyvitamin D (25OHD) levels from sunlight and ascertained their effect on the 25OHD level in 2,347 participants from a population-based cohort. Four genetic variants in the genome were significantly associated with vitamin D levels and an association between these genetically reduced levels and susceptibility to MS was found. Although the study suggests that low vitamin D levels have a role in causing the development of multiple sclerosis, more work is required to determine the impact of increasing vitamin D levels in people with a high risk of developing MS.


http://tinyurl.com/QMSRU-19-4-9

Clinically isolated syndrome

Kable J, Disanto G, Dobson R, et al.

Conversion from clinically isolated syndrome to multiple sclerosis: a large multicentre study.

Study explored clinical and biochemical variables that predict conversion from a clinically isolated syndrome (CIS) to clinically definite MS in a cohort of 1,047 people with CIS and two years follow-up. Predictors of conversion were found to be the presence of oligoclonal bands (OCBs) and number of T2 lesions. Risk was found
to be particularly high in people with both OCBs and a high number of T2 lesions, almost 90% of those in the trial with these features converted to clinically definite MS within five years. Age at CIS onset was inversely associated with risk of conversion. Lower serum vitamin D levels were also associated with conversion to MS but authors suggest that this requires further investigation. Mult Scler 2015;21(8):1013-24. [Ref 19-4-10]

**Prognosis**


Poor early relapse recovery affects onset of progressive disease course in multiple sclerosis.

191 people with relapsing MS formed the population based cohort of the study. Over the first five years 80% had good relapse recovery and, of those, half developed progressive MS within 30 years. For those who were poor relapse recoverers this time was eight years. A clinic based cohort of 415 people with relapsing MS demonstrated that good recovery from the first relapse alone was associated with delay to progression. Authors suggest that these findings demonstrate treatment implications for practice such as rapid escalation of effective disease modifying therapies early where necessary, and conclude that people with poor recovery from relapse will develop a progressive disease course earlier.


"You are just left to get on with it": qualitative study of patient and carer experiences of the transition to secondary progressive multiple sclerosis.

20 people with MS and 13 carers were interviewed and eight people and two carers participated in focus groups. Researchers found that people varied widely in their reaction to the transition in their MS. The major themes that emerged were: realising that MS had become secondary progressive; reacting to this change; dealing with the healthcare system during this time; challenges for the future. People wanted to know what secondary progressive meant to them and what they could do to help themselves. This included access to information on secondary progressive MS. The improved understanding of people’s experiences offered by this research can help health professionals to provide better support during this phase of MS.

BMJ Open 2015;5(7):e007674. [Ref 19-4-12]
http://tinyurl.com/QMSRU-19-4-12

**Employment**

Baughman BC, Basso MR, Sinclair RR, et al.

Staying on the job: the relationship between work performance and cognition in individuals diagnosed with multiple sclerosis.

44 individuals diagnosed with MS who were in employment were assessed to determine employer and self-rated work performance, mobility status and neuropsychological function. Results suggested that cognitive impairment was common despite good mobility status. Work performance was rated poorly by supervisors but higher in individuals with cognitive impairment.


Work participation and executive abilities in patients with relapsing remitting multiple sclerosis.

55 people with relapsing remitting MS, 36% of whom were employed, underwent neurological, cognitive and psychological assessments. Authors found that those not in employment had longer disease duration, reported more organising and planning problems, higher distractibility and more cognitive fatigue than those in work. However few differences were detected objectively. Authors suggest that identification of both subjective and objective cognitive difficulties may be of importance in offering effective work adaptations and rehabilitation.

http://tinyurl.com/QMSRU-19-4-14

**Carers**

Madan S, Pakenham KI.

The stress-buffering effects of hope on changes in adjustment to caregiving in multiple sclerosis.

140 informal carers and their care recipients completed questionnaires at baseline and 12 months later that explored global hope and its components. Greater hope was associated with positive adjustment for carers. Authors conclude that hope is an important protective resource for coping with MS caregiving. Practice implications suggest benefits of promoting hope in MS carers through identifying defined meaningful and measurable goals.

J Health Psychol 2015;20(9):1207-21. [Ref 19-4-15]
Outcome measures


The use of goal attainment scaling in neuropsychological rehabilitation in multiple sclerosis.

98 people were randomised to receive neuropsychological rehabilitation once a week for 13 consecutive weeks or became controls where every person was able to set personal goals. The aim of the study was to evaluate whether goal attainment scaling (GAS) goals were reached and if attaining the goals was related to rehabilitation outcome measures. Authors found that GAS seemed to be an appropriate outcome measure in this domain, GAS rated personal goals were well achieved, covered areas omitted with standardised outcome measures and were able to include specific needs of individuals.

Disabil Rehabil 2015;37(21):1984-91. [Ref 19-4-16]

MS services

Jarrett L.

Being and becoming a spasticity nurse specialist: a reflexive narrative study.

The aim of the study was to explore the use of guided reflection in informing the growth of professional knowledge as a spasticity nurse specialist. Six case studies from clinical practice were developed into reflective texts and a narrative was constructed that detailed the practitioner journey. Insights resulted in appreciating the highly refined strategies a person with complex disabilities develops to navigate life. The author suggests that understanding this “precarious harmony” is vital in effectively supporting the person to self-manage their spasticity and develop an alliance with the health professional.

Br J Neurosci Nurse 2015;11(3):129-36. [Ref 19-4-17]

Leary A, Quinn D, Bowen A.

Impact of proactive case management by multiple sclerosis specialist nurses on use of unscheduled care and emergency presentation in multiple sclerosis: a case study.

A retrospective service evaluation was carried out in an established MS nursing service. The impact of introducing proactive nurse-led management, a rapid response service on rates of emergency presentation and hospital bed use was examined. Nursing hours were increased by six hours per week, achieved by reallocating routine administrative tasks and a care pathway was implemented in the emergency department for patients with MS who did present. This move from reactive to proactive management resulted in reduction of bed days from a mean of 2700 bed-days per year (2002–2006) to a mean of 198 bed-days per year (2007–2013).

Int J MS Care 2015;17(4):159-63. [Ref 19-4-18]

Leary A, Mynors G, Bowen A.

Modelling the complex activity of multiple sclerosis specialist nurses in England.

Data collected from 12 MS nurses working in five different NHS trusts based in hospital and acute settings with a case load across the group of 255 people, recorded work over a period of three weeks. These data were analysed and activity was found to be broken down into the following categories: physical 43.1%, psychological 18.9%, social 12.5% and administration 25.6%. This demonstrated that specialist advanced practice nursing is a complex activity driven by patient and carer needs, that the work of the MS nurse is nonlinear and complex with many interrelated activities.