Disease modifying treatments


Immunomodulators and immunosuppressants for relapsing-remitting multiple sclerosis: a network meta-analysis.

This review pooled data from 39 high quality studies of 15 different disease modifying treatments for MS published to September 2014, including some that are less routinely used. The studies included 25,113 adults with RRMS who were treated for an average of two years. Whilst authors suggest a cautious interpretation of the results of this review alemtuzumab, natalizumab and fingolimod were shown to outperform the other drugs in terms of reducing relapse during the first 24 months of treatment and that the most effective of these was alemtuzumab. Insufficient good quality evidence was found to evaluate treatments for prevention of irreversible disability. The majority of studies used the surrogate of disability worsening confirmed at three months follow up, but only natalizumab showed a beneficial effect on the basis of moderate quality evidence. Authors suggest that it will be necessary to evaluate non-randomised studies and post-marketing reports from the regulatory agencies to provide long-term safety data.

Cochrane Database Syst Rev 2015; 9:CD011381. [Ref 20-1-1]
http://tinyurl.com/QMSRU-20-1-1

MS relapse

Roberts M, Lush T, Poborely J.

Improving reporting of multiple sclerosis relapse.

Article highlights the importance of recognising relapse as a sign of active disease and reviews why relapses may not always be reported or recorded. Reasons for not reporting relapse for people with MS included: feeling like a burden to the healthcare team; believing nothing could be done; not recognising the relapse or not remembering the relapse. For health professionals lack of training; poor information for people with MS and lack of consensus on relapse management were all highlighted as barriers. Authors go on to consider the use of the SymTrac App to monitor symptoms with the goal of better highlighting possible relapse.


Self-management


Exploring strategies used following a group-based fatigue management programme for people with multiple sclerosis (FACETS) via the fatigue management strategies questionnaire (FMSQ).

59 people who had taken part in the FACETS programme completed the questionnaire sub study four months after its end. The three most used strategies by the respondents were prioritisation (93%), grading (91%) and pacing (91%). Free text comments illustrated that expectations from both self and others could act as facilitators or barriers to effective fatigue management. Authors conclude that this study supports the relevance of a CBT approach to fatigue management and that booster sessions of the FACETS programme may be helpful.

BMJ Open 2015;5(10):e008274. [Ref 20-1-3]
http://tinyurl.com/QMSRU-20-1-3
Efficacy of a telephone-delivered self-management intervention for persons with multiple sclerosis: a randomized controlled trial with a one-year follow up.

163 adults with MS and fatigue, chronic pain and/or moderate depressive symptoms were randomised to receive either eight weeks of an individual telephone-delivered self-management or MS education intervention. Both groups showed >50% decrease in one or more target symptoms and improved in self-efficacy, activation and social roles which were generally maintained at six and 12 months. Authors conclude that this study demonstrates the telephone as an effective method for engaging people with MS in care and extending the reach of rehabilitation.


Symptoms

Engeler DS, Meyer D, Abt D, et al.

Evaluation of safety and efficacy in 13 women and four men with MS, 53% of whom were relapsing remitting, 41% secondary progressive and 6% primary progressive. Inclusion criteria included diagnosis of lower urinary tract dysfunction due to MS confirmed by urodynamic examination and storage problems or voiding symptoms. 16 people found >70% improvement during the test phase, and at three years following implantation median voided volume, post void residual volume, episodes of incontinence and frequency of urination had improved significantly. High satisfaction rating was also recorded from the people treated with SNM. Authors conclude that SNM can be considered as an option for carefully selected people with neurogenic lower urinary tract dysfunction caused by MS.

http://tinyurl.com/QMSRU-20-1-5

Beckmann Y, Ozakbas S, Bulbul N, et al.
Reassessment of Lhermitte’s sign in multiple sclerosis.

Prospective study of 694 people with MS and age matched controls by questionnaire, MRI and evoked potential tests. 16% of people in the cohort reported Lhermitte’s sign but no correlation was found between this, EDSS, age, gender or disease duration. However on MRI 88% of participants with Lhermitte’s exhibited cervical cord demyelinating lesions and positive somatosensory evoked potentials. Authors suggest increased awareness of this phenomenon in the MS population would be valuable.

Acta Neurol Belg 2015;115(4):605-8. [Ref 20-1- 6]

Fiest KM, Fisk JD, Patten SB, et al.
Comorbidity is associated with pain-related activity limitations in multiple sclerosis.

949 consecutive patients with MS were recruited to a questionnaire study completed at three visits over two years. 31% of participants reported pain which disrupted activity over this time. 41% of those in the study experienced at least one comorbidity and those with more comorbidities were increasingly likely to report disruptive pain. People with fibromyalgia, peripheral vascular disease and rheumatoid arthritis at baseline were the most likely to report pain. Authors suggest that recognising and understanding these associations may result in improved symptom management and quality of life.


Fiest KM, Walker JB, Bernstein CN, et al.

13 randomised controlled trials from 1984–2014 met the inclusion criteria for this review. Depression severity improved in nine psychological trials and three pharmacological trials leading the authors to conclude that both these approaches are effective in reducing depressive symptoms in MS. However data was not sufficient to determine the effectiveness for treatment of anxiety.


Systematic review: the effectiveness of interventions to reduce falls and improve balance in adults with multiple sclerosis.

15 articles were included in the review, all of which evaluated exercises with balance outcomes and five which additionally evaluated an aspect of fall outcomes. Overall quality of falls reporting was found to be low. Authors conclude that given the limitations of the current evidence base this review could only suggest that an exercise based approach may be an appropriate fall intervention but that a range of exercise interventions improve balance outcomes. Programmes using gait, balance and functional training showed the greatest effect.

Arch Phys Med Rehabil 2015;96(10):1898-912. [Ref 20-1- 9]
Darija KT, Tatjana P, Goran T, et al.


93 people with MS were assessed at baseline, three and six years. Over this time number of reported symptoms for both genders increased and prognostic factors included duration of follow up, age, physical disability and fatigue. People with at least one symptom of sexual dysfunction increased from 79% to 89% for males and 73% to 88% for females over the six year study period. Reduced libido was the most commonly reported problem. Authors suggest that clinicians could focus on a more careful and sensitive approach when assessing the impact of sexual dysfunction and screening should be considered as part of any comprehensive clinical assessment.

J Neurol Sci 2015;358(1-2):317-23. [Ref 20-1-10]

Exercise

Heine M, van de Port I, Rietberg MB, et al.

Exercise therapy for fatigue in multiple sclerosis (Review)

36 studies involving 1,603 people were included in the analysis. Overall people participating in the trials had relapsing remitting MS and an EDSS < 6. Based on 26 controlled trials authors found a significant effect on fatigue compared to no exercise for endurance training, mixed training, and other training. Authors conclude that MS exercise therapy can be prescribed to people without harm and may reduce self-reported fatigue. Authors highlight that one drawback of the studies included was that people experiencing fatigue were not specifically included.

http://tinyurl.com/QMSRU-20-1-11

Clarke R, Coote S.

Perceptions of participants in a group, community, exercise programme for people with multiple sclerosis.

Focus group study of 14 participants who had taken part in multicentre randomised controlled trial of community based exercise interventions. Three key themes emerged: psychological benefits; physical benefits and knowledge gained. The role of the group as a positive element of the intervention crossed all themes and was found to be motivational in enhancing adherence and continued exercise following completion of the programme. All participants reported a psychological benefit from being part of the programme and gaining knowledge about exercising with MS. Authors suggest that an educational component in exercise programmes could be beneficial for participants.


Employment

Coyne KS, Boscoe AN, Carrie BM, et al.

Understanding drivers of employment changes in a multiple sclerosis population.

27 people with mean MS duration of 11 years who had recently reported leaving the workforce, reducing hours or changing jobs participated in semi-structured interviews. These explored key symptoms and drivers for change in employment status. Physical symptoms predominated, the most common reported as fatigue (59%) and feeling weak (25%). 40% of people described at least one cognitive symptom, with memory loss or forgetfulness most common but lack of mental agility also rated as important. The interconnectedness of symptoms was cited as a key factor. Authors suggest health professionals should help people to understand how MS may affect their ability to perform at work, prepare for adjustments and recognise the importance of comprehensive symptom management. Health professionals should be aware of the mental, emotional and financial impact of work reduction or loss on people with MS.

Int J MS Care 2015;17(5):245-52. [Ref 20-1-13]
http://tinyurl.com/QMSRU-20-1-13

Frdnak SE, Irwin LN, Kordovski VM, et al.

Negative work events reported online precede job loss in multiple sclerosis.

Study aimed to identify people with MS at risk of job loss by means of online survey. 284 employed people, 221 of whom had MS, were evaluated every three months using an online vocational monitoring tool for an average of 13 months and results analysed for frequency of negative events reported. People at risk of job loss were found to be more likely to report negative work events, such as removal of responsibilities or verbal criticism, in the previous three months. Authors suggest the importance of identifying those at risk of job loss and that an online survey tool could be used to trigger clinical assessment and appropriate timely intervention strategies.


Ageing

Bubse M.

The elderly person with multiple sclerosis: clinical implications for the increasing life-span.

Author highlights the limited data available on ageing with MS and the impact on health related quality of life but suggests that screening of this group for social isolation, depression, physical disability, the effects of cognitive impairments and comorbid conditions are essential. Encouraging this group to stay active both physically and mentally, use rehabilitation services and cognitive screening in addition to recognising the influence of comorbidities and general health screening are also deemed important.

Psychosocial adjustment

Tabuteau-Harrison SL, Haslam C, Mewse AJ.

Adjusting to living with multiple sclerosis: the role of social groups.

Qualitative exploration of the lived experience of 15 people aged 42-67 with a diagnosis of MS ranging from one to 40 years, 11 of whom were women. Three key themes emerged: loss and change in social roles and relationships, positive and negative experiences with social groups and social participation as distraction. Authors suggest that maintaining social roles pre and post MS diagnosis, the capacity to join new social groups and the avoidance of being only defined by MS were critical in positive adjustment to the condition. Neuropsycho Rehabil 2016;26(1):36-59. [Ref 20-1-16]

Women’s health

Kempe P, Hammar M, Brynhildsen J.

Symptoms of multiple sclerosis during use of combined hormonal contraception.

22 women taking the combined hormonal contraceptive pill, with median age 34 years and EDSS 1.75 completed symptom diaries to monitor cyclical changes over the course of three cycles. This found that women scored four out of ten symptoms lower during the last week on CHC than during the pill free week. Authors conclude that women report more pronounced symptoms during the pill free week (low oestrogen/progesterone phase of CHC) and suggest that continuous use regimes should be further investigated. Eur J Obstet Gynecol Reprod Biol 2015;193:1-4. [Ref 20-1-17]

Epidemiology

Jick SS, Li L, Falcone GJ, et al.

Epidemiology of multiple sclerosis: results from a large observational study in the UK.

Population based observational study using data which identified people with a diagnosis of MS from 2001-2006 on the Clinical Practice Research Database (CPRD) – formerly the General Practice Research Database. 1,278 incident and 63 prevalent MS cases were identified from over this time. Following MS diagnosis most frequent comorbidities were infections (80%) and depression (46%). There was increased risk of death during the study period if people were current or former smokers at time of diagnosis or had a history of alcohol abuse. Authors conclude that certain modifiable factors act in combination with MS to impact on survival and more work is needed to evaluate how this might compare with the general population. J Neurol 2015;262(9):2033-41. [Ref 20-1-18]

Complementary and alternative medicines

Rogers KA, MacDonald M.

Therapeutic yoga: symptom management for multiple sclerosis.

Review explores current evidence for use of mind-body modalities in symptom management and suggests that yoga is a safe and effective means of managing MS symptoms including pain, stress, bladder dysfunction, fatigue and balance. Authors conclude that more research needs to be carried out to determine the most beneficial types of yoga and specific uses in MS. J Altern Complement Med 2015;21(11):655-9. [Ref 20-1-19]

Rehabilitation

Haselkorn JK, Hughes C, Rae-Grant A, et al.

Summary of comprehensive systematic review: rehabilitation in multiple sclerosis.

Extensive systematic review to evaluate therapies available in MS rehabilitation highlighted the lack of well-designed studies and consequent robust evidence. This precluded recommendations regarding effective rehabilitation therapy beyond 12 weeks. However it was able to conclude that there is weak evidence to demonstrate: eight weeks of weekly home/outpatient physical therapy is probably effective for improving balance and gait; three weeks of inpatient exercise followed by 15 weeks of home exercise are possibly effective for improving disability; six weeks of comprehensive multidisciplinary rehabilitation is possibly effective for improving function. Neurology 2015;85(21):1896-1903. [Ref 20-1-20]