Integrated multidisciplinary clinics should be the gold standard in managing progressive MS – NO

Caroline Papeix and Catherine Lubetzki

Multiple sclerosis (MS) is characterized by a wide range of clinical symptoms, with intra-individual and inter-individual variability. Due to this complexity, many MS clinics have developed a multidisciplinary team approach to manage the multiple aspects of the disease. In this respect, it is tempting to consider an integrated intervention within a multidisciplinary outpatient clinic; gathering different team members at the same place is valuable, not only for the benefit of the patient but also for health organization. Whether this integrated multidisciplinary approach is more beneficial for the patient than a more usual type of care, where interventions are not integrated, but arranged by successive referrals to required medical and allied health professionals, remains, however, an open question.

To try to answer this question, our MS team set up a study, aimed at comparing the integrated multidisciplinary program (routinely carried out in our MS clinic for 10 years and consisting of a half day individually tailored comprehensive assessment) with a non-integrated approach. This prospective, randomized, controlled, mono-centric clinical trial included consecutively 55 MS patients. Contrary to our expectation, the results show that an integrated multidisciplinary approach is not superior to usual multidisciplinary care on quality of life (QoL), used as a primary outcome measure. The size of the study population was limited, due to the difficulties in performing a randomized study to assess and compare different methods of management of care. In addition, the study population was not representative of the whole MS population but rather corresponded to more severely disabled patients (median Expanded Disability Status Scale (EDSS) score of 6), in the progressive phase of the disease in most cases. However, despite these potential biases, these negative (and disappointing) results questioned our daily practice.

With these data in mind, different questions can be addressed: (a) Are these results specific to MS management, or can they be extrapolated to other chronic neurological diseases? (b) Should these negative results modify our clinical practice for the long-term management of MS patients? (c) Should we propose multidisciplinary care for all MS patients or develop a procedure to identify patients in need for a multidisciplinary care?

Concerning the first point, it is important to be aware that only a few studies have evaluated the impact of a multidisciplinary approach on chronic neurological diseases. Among these few studies, most of them focused on Parkinson’s disease. Interestingly, a recent non-randomized study, comparing a multidisciplinary approach to usual care in Parkinson’s disease, did not find any significant difference in QoL scores used as primary outcome. In this carefully performed study, however, it was evident that the number of visits with the different health professional specialists was not different between the two groups, suggesting that, as in our study, all patients benefited from a multidisciplinary care but that QoL was not influenced by the integrated or non-integrated strategy of care. We therefore believe that the benefit, on QoL, of an integrated multidisciplinary approach in different neurological diseases with chronic disability is not demonstrated.

Whether these negative results should modify our clinical practice for the long term management of MS patients is not an easy question, and we believe that there is not yet sufficient evidence to take this important decision. However, it was evident from our study that many patients did not effectively follow the plan of care, either due to difficulty in finding the required health professional or due to motivational factors, to fatigue, cognitive dysfunction, professional activity, caregiver’s availability, and so on. This is why we have recently initiated a new program in which, at the first visit with the dedicated MS neurologist and MS nurse, we determine, with the help of the patient and his or her caregiver, the need for multidisciplinary...
care, and the different health professionals needed for a given patient. Then, after the scheduled visits are completed, the MS nurse is involved, through follow-up calls, in optimization of the effective access to the multidisciplinary plan of care. This study should help us to gain better insight into the optimal way to manage progressive MS patients.

Another important issue is whether an integrated multidisciplinary care is superior to the more usual type of multidisciplinary care in relation to the economic cost. This key question was not addressed in our study. Integration of care, with the whole medical and paramedical team at the same place within the same half day for the same patient, certainly reduces the number of visits (and related travel costs) for the patients; however, it is time-consuming for the health professionals, with the need of a very precise, careful organization to optimize this consultation process.

Concerning the third question, the identification of patients in need for a multidisciplinary approach, the only tool to date (to our knowledge) is the INTERMED score, which was not devised for patients with chronic neurological diseases and proved, in our hands, not to be so discriminatory in relation to the assessment of the need of multidisciplinary care for a given patient. We believe that MS patients’ management should be tailored on individual’s level of disability assessed by EDSS score and/or based on patient’s complaints and impairment. Patients with a low EDSS score (1–3) and mild impairment are probably not in need for a multidisciplinary care. Multidisciplinary care might be focused on patients with a greater disability often experiencing socio-professional obstacles or to patients with progressively reduced autonomy and QoL. For these latter patients, several reports have suggested the value of in-patient rehabilitation admissions on disability and on some aspects of QoL. However, as stated above, new tools to assess the need of multidisciplinary care are needed.

In conclusion, the benefit of multidisciplinary health specialists’ expertise and advice for a given MS patient with chronic disability is not in question. However, the benefit of an integrated multidisciplinary approach compared to usual care for disabled MS patients has not been demonstrated. We believe that the benefit of the multidisciplinary approach is less related to the temporal aspect of interventions (integrated or successive) than to the effective access to the resulting plan of care with multiple health care professionals. Studies in which this “real life” care is taken into account will lead to a better assessment of MS care organization.

Declaration of Conflicting Interests
The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding
The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Part of the work was supported by the program “Investissements d’avenir” ANR-10-IAIHU-06.

References