ECTRIMS 2022
38th Congress of the European Committee for Treatment and Research in Multiple Sclerosis
27th Annual RIMS Conference
26 – 28 October 2022
Amsterdam, The Netherlands

P456

Deciphering multiple sclerosis disability progression in the elderly: a multicenter cohort study

J.-C. Ouallet[1], F. Rollot[2], R. Casey[2], G. Edan[3], S. Vukusic[4]
[1]CHU de Bordeaux, Service de neurologie et maladies inflammatoires du système nerveux central, Bordeaux, France, [2]Université de Lyon, Université Claude Bernard Lyon 1; Service de Neurologie, Sclérose en Plaques, Pathologies de la Myéline et Neuro-inflammation, Lyon, France, [3]Clinical Neuroscience Centre, CIC-P 1414 Inserm Université de Rennes 1, Service de neurologie du Centre Hospitalier Universitaire de Rennes, Rennes, France, [4]Centre des Neurosciences de Lyon, INSERM 1028 et CNRS UMR5292, Observatoire Français de la Sclérose en Plaques /Université Claude Bernard Lyon 1, Service de neurologie, sclérose en plaques, pathologies de la myéline et neuro-inflammation et Fondation Eugène Devic EDMUS pour la Sclérose en Plaques, Hôpital Neurologique Pierre Wertheimer, Hospices Civils de Lyon, Lyon-Bron, Lyon, France

Introduction: Little is known about Multiple Sclerosis (MS) in the elderly.
Objectives: Primary objective: to describe the dynamics of disability progression rates in MS patients between 65 and 75 years old (EDSS ≥ 4.0, EDSS ≥ 6.0, EDSS ≥ 7.0 milestones). Secondary objectives: to describe secondary progression rates, relapses and other clinical, MRI and therapeutic data.
Methods: Patients between 75 and 77 years old with MS onset before age 65 followed in 3 main large OFSEP database centers (Bordeaux, Rennes and Lyon) were identified. Patients were contacted again to collect retrospectively clinical, MRI and therapeutic data (OLDMUS study, ClinicalTrials.gov Identifier: NCT03854123). Dynamics of disability progression rates (irreversible EDSS milestones) according to time were evaluated using unidimensional penalized parametric hazard models. Baseline was defined as the 65th birthday of each patient.
Results: 256/592 MS with available EDSS data from age 65 to 75 in the databases were included (65% female; mean EDSS 5.4 +/- 1.79 at age 65). There was no significant difference between the two populations (included / not included lacking EDSS data from age 65 to 75) in terms of demographic and clinical characteristics before the age of 65.
From age 65 to age 75, the cumulative probability of event (EDSS ≥ 4.0; EDSS ≥ 6.0; EDSS ≥ 7.0) was 54.5% (35.6-75.6); 52.1% (39.8-65.7) and 44.0% (35.1-54.1).The event rates of disability progression (EDSS ≥ 4.0; EDSS ≥ 6.0) decreased from 65 years to 75 years. The yearly probability of EDSS ≥ 4.0 (respectively EDSS ≥ 6.0) was around 21.1% (8.7%) at baseline and was 1.8% (6.2%) at 75 years-old.
There was an almost linear decrease in secondary progression (SP) transition rates between 65 and 75 years of age, from a yearly probability of reaching a SPMS phenotype of 6.8% at baseline to 3.9% at 75 years.
From age 65 to age 70, the risk of relapse was similar (around 3.0% per year) and then decreased to 1.6% (0%-4.0%) at age 75.
Over the period 65 - 70 years, 13 patients with gadolinium (gd) enhancement were identified among the 75 patients who had an injected MRI (17.3%) whereas there were 5/57 (8.8%) over the period 70-75 years.
Conclusions: MS may switch off in the very-old patients, especially after the age of 70, with a decrease in disability progression, a decrease in the achievement of a secondary progression, very few relapses and uncommon MRI activity.
Disclosure: Dr. Ouallet reports financial support from Novartis for this study. Personal fees from Biogen, Roche, Novartis, Merck, Genzyme, BMS, Alexion ,outside the submitted work. Fabien Rollot: nothing to disclose. Romain Casey: nothing to disclose; Gilles Edan: nothing to disclose. Sandra Vukusic: nothing to disclose