Disease-modifying therapies use in primary progressive multiple sclerosis patients in France: data from the OFSEP cohort over the 1996-2017 period

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Background: Up to now, treatment options were poor for primary progressive multiple sclerosis (PPMS) patients, as disease-modifying therapies (DMTs) approved for relapsing-remitting multiple sclerosis (MS) did not show any efficacy in this form. However, many DMTs are proposed off-label, in an attempt to reduce disability progression and answer patients’ expectations.

Objective: To describe the use of DMTs in real-life settings in a large cohort of PPMS patients from the French OFSEP cohort (‘Observatoire Français de la Sclérose en Plaques’) over 1996-2017 period.

Methods: All OFSEP patients with PPMS and alive on 1996, Jan 1st (to get a chance to be treated with a DMT approved in MS) were included, i.e. 6,507 patients among a total of 54,000 MS patients. All DMT were considered, without any minimal duration.

Results: Overall, 56.6% of PPMS patients received at least one DMT over follow-up period, started at a mean age of 47.4 ± 10.9 years, after a mean DMT duration of 6.0 ± 5.7 years, and for a cumulative duration of 4.3 ± 4.4 years, i.e. 32% of follow-up duration.

Table: Initial characteristics of the overall population and of incident cases in each period

Discussion: This study highlights the active attitude of French neurologists regarding use of DMTs in PPMS (>50% treated) as well as the diversity of practices. Indeed, neurologists seem to be inclined to try all kinds of drugs, when they came available for relapsing MS, and earlier now than before. DMT is sometimes started later in the disease or at an advanced age (but level of disability was not considered here). However, the limited duration of DMTs probably reflects the fact that neurologists don’t initiate a patient under a drug if the expectations regarding efficacy are not met. Some patients did not receive any DMT over their whole disease duration (30 to 50% depending on DMT duration). A national scale offers the opportunity to assess changes in daily practice with the perspective of newly approved drugs in PPMS in the coming months or years in France.

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Figure 1: Distribution of DMTs use over time 1990-2017: A. including untreated patients. B. excluding untreated patients.

Figure 2: Proportion of treated patients, age and disease duration (DD) at first DMT initiation over F/U period in the four incident cohorts.

Figure 3: Types of DMTs used over the four periods.

More detailed discussion is provided in the main text.