INCIDENCE AND TREND OF PROGRESSIVE MULTIFOCAL LEUKOENCEPHALOPATHY (PML) IN PATIENTS WITH RHEUMATOID ARTHRITIS IN SPAIN. (TREND-AR STUDY)

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Background: Treatment with biological agents is recognized as a potential risk factor for the development of Progressive Multifocal Leukenoencephalopathy (PML), a rare and often fatal demyelinating disease of the CNS caused by John Cunningham Virus infection.

Objectives: Analyze the incidence and trend of hospital admissions for PML in patients with RA, in Spain, during the period between 1999 and 2015.

Methods: Population study based on the analysis of a national administrative database that includes a Minimum Basic Data Set (MBDS) of the income of patients with RA (ICD 9 714). Period: January 1, 1999, to December 31, 2015. The cases of PML were identified due to the presence in the primary and secondary diagnosis of the codes ICD 9 046.0 to 046.9. The population at risk was estimated through the population census of the National Institute of Statistics, with an estimated prevalence of RA of 0.5% in both sexes (0.2% in men and 0.8% in women). Crude and adjusted rates were calculated at national level. The trend was analyzed using Generalized Linear Models (MLG) using the variable year as the analysis variable.

Results: Of the total of 338,343 hospital admissions in patients with RA during the 17 years of the study period, only 14 cases (0.004%) of PML were recorded, nine (64.3%) were women and 5 (35.7%) men. The mean age was 69.5 years (SD 16.8); 74.56 (SD 14.8) in women and 60 (SD 18.1) in men (p = 0.145). Five patients (35.7%) died during admission (2 women and 3 men) (p = 0.266). The average of the Charlson index was 2.21 (SD 1.7); 3 (SD 2.5) in women and 1.78 (SD 1.1) in men (p = 0.227).

The crude incidence rate of PML was 0.54/100,000 inhabitants * year, 0.85/100,000 inhabitants * year in men and 0.37/100,000 inhabitants * year in women. The Relative Risk male: female was 2.34. The gross rate of PML increased from 0.32/105 * year in the period 1999-2002, to 0.74 between 2011 and 2015, both in women (from 0.19 in the period 1999-2002 to 0.52 from 2011 to 2015) as well as men (from 0.82 in the period 1999-2002 to 1.64 during 2011-2015). It is estimated that this increase is of 19.7% per year.

Conclusion: In Spain, between 1999 and 2015, there has been an increase in the incidence rate of PML in patients with RA. We estimate an annual increase of 19.7%.

Disclosure of Interests: None declared