MS incidence in Tuscany from administrative data

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ABSTRACT

BACKGROUND Italy is a high-risk area for multiple sclerosis with 110,000 prevalent cases estimated at January 2016 and 3,400 annual incident cases. To study multiple sclerosis epidemiology, it is preferable to use population-based studies, e.g. with a registry. A valid alternative to obtain data on entire population is from administrative sources.

OBJECTIVE To estimate the incidence of multiple sclerosis in Tuscany using a case-finding algorithm based on administrative data.

METHODS In a previous study, we calculated the prevalence in Tuscany using a validated case-finding algorithm based on administrative data. Incident cases were identified as a subset of prevalent cases among those patients not traced in the years before the analysis period, and the date of the first multiple sclerosis-related claim was considered the incidence date of multiple sclerosis diagnosis. We examined the period 2011-2015.

RESULTS We identified 1,147 incident cases with annual rates ranged from 5.60 per 100,000 in 2011 to 6.58 in 2015.

CONCLUSIONS We found a high incidence rate, similarly to other Italian areas, especially in women, that may explain the increasing prevalence in Tuscany. To confirm this data and to calculate the possible bias caused by our inclusion method, we will validate our algorithm for incident cases.